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Thomas H. Berkey, Clerk

By *Wm. H. Berkey*

Deputy.

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BOOKBINDERY.
8th, bet. J & K.
SACRAMENTO.

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THE COURT

OCTOBER

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THE COURT

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VOLUME

35

IN THE SUPERIOR COURT,

State of California, County of Sacramento.

OCTOBER SESSION, 1881.

HON. JACKSON TEMPLE, - - - - - PRESIDING JUDGE.

WINFIELD J. DAVIS, OFFICIAL REPORTER.

SAMUEL OSBOURNE AND WILLIAM M. CUTTER, REPORTERS.

The People of the State of California,
vs.
The Gold Run Ditch and Mining Co. }

COUNSEL:

For Plaintiff,

HON. A. L. HART, Attorney General, GEORGE CADWALADER, ISAAC S.
BELCHER, A. L. RHODES, RICHARD BAYNE.

For Defendant,

J. K. BYRNE, W. C. BELCHER, S. M. WILSON, W. T. WALLACE, A. B.
DIBBLE, A. P. CATLIN.

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In the ³⁵ Superior Court
of the State of California
in and for the County of
Sacramento

The People of the State of California v.s. The Goose Run Ditch and Mining Company	} Afternoon Session Tuesday January 10/82
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Corrified J. Davis
Official Reporter

In the Superior Court
of the State of California
in and for the County of
Fresno.

The People of the State of California	} Afternoon Session Tuesday Jan 10 th 1882
vs. The Gold Run Ditch and Mining Company	

Testimony
E. H. Evans.

Cross - resumed

Mr. Cadevalader. Mr. Evans
you say you got broke af-
ter you 16 months of
mining at
1877? a Nostr, at
the Stuckelberger mine.

Did you get broke there?

Yes, but the man right
along side of me made
\$40000. but I did not.

9862

I but is generally the

Condition of Every body that
has been mining or who
has ever mined in Eldora-
do County?

A No sir, I have been one
of those unfortunate ones

Q. You had to go to work
on the road after your min-
ing experience? A Yes I did

Q How long did you work
on the road? A I think
14 days

Q Where did you go to work
next? A After that?

Q Yes? A The next
place I worked was at
Rondout

Q How long did you work
there? A I worked
there 3 months.

Q What doing?

A I was ground sluicing

Q On wages? A No sir
for myself.

Q Where did you work next?

A After that.

Q Yes?

A After I

9863 worked at Rondout I worked

a piece of surface on South
Cannon near the old South
fork ditch.

Q Where did you go then?

A. And then I went from
there to work for the ditch
Company.

Q at what wages?

A a month?

Q Yes? a \$60. —

Q Where were you at work
between 1860 and 1870. Where
did you live between 1860 and
1870? A In 1860 I lived
in Pleasant Valley?

Q Where is that?

A It is about 11 miles ^{East of} south
of Placerville.

Q East of Smith? A Yes.

Q Where were you in 1861?

A In 1861 I was there yet
until winter.

Q Where were you in 1862?

A In 1861/2 I was there yet.
The winter of 1861/2 I was
at a place called Gay Ranch
I took it for debt.

Q You were ranching?

A Noen, it was a wayside house, it was called that.

Q You were keeping a tavern?

A I did not keep it in, I took it in and let a man run it for me.

Q Where did you live during that time? A That was about 7 miles on the Canon Road from Pleasant Valley.

Q Was Pleasant Valley a ranch or a mining camp?

A It is a mining camp.

Q Then what was it?

A A part of it was a ranch and a portion of it was a mine.

Q What were you doing there?

A I took a store in, for debt.

Q You were keeping store there?

A Yes.

Q What were you doing in 1864 and 1865? A I was working in 1864 for the Telegraph Company.

Q Doing what?

A I was superintending

the construction and repair
 2. On what section?

A. A portion of the time here,
 and a portion of the time in
 Nevada out as far as Utah.
 In 1864/5 I think I wintered
 at Salt Lake City

2. What were you doing in
 1866? A. In 1866, I
 worked for the Cureka Canal
 Company

2. Were you a water agent?
 A. No sir, I was working
 at repairs

2. You were a laborer were
 you? A. Yes, I worked
 at carpentering for them

2. A carpenter? A. Yes.

2. That is your business, a
 carpenter? A. No sir, I
 picked up all this. I un-
 fortunately did not learn
 a trade

2. You are a carpenter now?

A. No sir

2. What were you doing in
 1867-8? A. I worked at
 the Cureka in 1867

The Spring of 1868, I came on the old Smith Fork Canal and I hired to them for the same purpose - making repairs.

Q You are a carpenter?

A Not a carpenter

Q You built and worked in wood work? A. Well, I had a smattering of engineering and I did the leveling.

Q What were you doing in 1869-70? A In 1869-70 I was working for them

Q Working for them?

A Yes.

Q Whereabouts? A On the Smith Fork Canal

Q How far off from Placerville? A Well, a portion of that time I lived in Placerville. I made my home there, but the first year I was up on the Canal about two miles from Negro Hill or about 14 miles. I would call it from town.

Q How long were you out of the State? A When?

Q Between 1869 and 1870 — Between 1868 and 1870?

A You mean in Nevada?

Q Yes? A I never came out of the State more than 5 or 6 months at a time before I came home back. I always claimed a residence in Eldorado County.

Q How did you come to the conclusion that \$500,000.00 had been taken out of Eldorado County?

A From what? I just take it from what I have seen and my knowledge and what I had seen, and as a matter of course from what I have heard.

Q Did you ever see a million of dollars? A Yes sir, I believe I did in this City.

I believe I saw a million of dollars in this City.

Q Where? A At a

bank down here, I think
 and once I was at Wells
 Fargo & Co's office in San
 Francisco and Charley Perren
 was sealing up - you know
 what that is to send East -
 and he said that that ship-
 ment that was going, what
 they were sealing up, and
 the other he said was a
 million of dollars.

Q. Do you know how long
 it would take the man
 to earn a million of dollars?
 A. Yes.

Q. How long? A. Well, if
 he could make \$1000 a day
 it would take him a good
 while, but if a man made
 a dollar a day I do not know
 how long it would take.

Q. Do you know how long
 it would take the few
 men to earn \$1,000,000

A. It depends on how much
 it will pay. For instance
 I knew a man on Kelsey
 Ben to make 200 pounds

of gold dust, Jim Miller,
and he went to Australia
afterward

2. You have known 10,000
men to work without making
wages? A. And I will
tell you of another man that
I knew. There was Blunden
and Osborn in this same claim
that I got broke in. I quit
there and they took it, and
they took out and shipped
to the mint at one time

114 pounds in about 3 days
work. They pounded it out
in a hand mortar that is
my knowledge of the bulk
of the money. I said 50.
000. 000. If a man should
ask me what was taken
out I should say about
50,000. 000

2 The word strapped rep-
resents the average condition
of miners, does it not?

A You can find strapped
miners, and I have seen
strapped men a good many

them in this town

Q Is there not less property in Eldorado County now than there was 20 years ago?

A No you mean in money?

A No; less property, real and personal property.

A Most of our property men down here in Oakland made their raise in Eldorado County. Every body when they made their money up there did not stay there or in Sacramento either, but there is enough of Eldorado men down here in Oakland to make a society and these men are wealthy, and they made their money there since I have been there. Because I did not make it should not affect the estimate.

Q Is there not less real and personal property in Eldorado now, than there was 20 years ago?

A That I could not state.

2. I'm right to know that much. A I might know it but I cmed not unless I had something to go by. I do not carry that in my mind and I can not tell you about it. I cmed not tell you without looking what the population of the County is, still I know, but I cmed not tell you in round numbers.

I You cmed make a guess?
 a I cmed make a guess I suppose

2 Is there not 80 per cent less property in Eldorado County now than there was 20 years ago

Mr. Dibble Subject to that. It is not a Crop Examination

a I tell you that I cmed not answer it, and I will not answer

Mr. Cadevalader This witness is a statistician?

a Now, I have not made any pretence of being one. I

told you that sir. I told you what I know. I told you what I believed the amount was that came out and what I believed about comes come out. I honestly believe that that much is in there and the reason that I believe it is that there has over \$50,000,000 so far been taken out and I think there are 100,000,000 left.

2. You are not answering my question?

The Reporter read the question.
A. I do not answer that question. I will not answer that question.

2 You will not?

A No sir

2 Have you ever known what property there was in Eldorado County at any time?
A. I have seen

Statistics, yes

2 What Statistics?

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Mr Dibble

I object to that

it is not in Crop - Examination.

The Court. That is not in Crop - Examination.

The Court. -

Mr Cadwalader Where is this undeveloped property you speak of, where does it lie?

A It lies between the South Fork of the American River and the Middle Fork of the Cosumnes River. It starts at the South Fork. I know where the Blue gravel is there.

Q How much is in the American River basin and how much is in the Cosumnes Basin? A. It runs across these streams as far as I have been on it. The Middle Fork where it strikes it cuts it in two.

Q What proportion of it is in one basin and what in the other. You do not appear to listen to anything that I say to you. What

proportion of their undeveloped
mining ground is in the Amer-
ican basin, and what in
the Cosumnes river basin?

A Well, there is $\frac{2}{3}$ of it that
would be in the range of coun-
try that I call — I do
not know what you mean by
a basin, but do you mean
that it comes out into a
stream, is that what you mean?

2 Yes? A. $\frac{5}{3}$ of it
comes run into the American
water.

2 And $\frac{1}{3}$ into the Cosumnes? A. Yes.
2 What proportion of it is
North of the South Fork?

A None at all, I am talking
about the entire portion of the South Fork.

2 I want to know what
part of it is between the South
Fork and the Middle Fork of
the American River?

A I do not know, anything about that.
I started at the South Fork of
the American River, going south. That
is what I am talking about. I
do not know anything about across the river

Q What is the government price for this land this undeveloped land?

A \$2.50 an acre

Q Is it all entered?

Ans sir it is not all claimed

Q Now could any person go up there and get it for \$250 an acre? Ans: they claim without entering there

Q Now anybody is entitled to buy that are they not?

Ans sir. There is a great portion of it claimed

Q Is it entered?

Ans sir, it is not entered, no sir. It does not require a man to enter land to have a title to mining land. He does his work there and keeps it until he chooses to enter it

Q That is the law is it?

A That is the law as I understand it

Q How many persons are

occupying this surface under which these hundred and fifty millions are lying? A I could not tell you that.

Q You do not know?

A No sir I could not say how many persons there are.

Q How much of it developed and how much is ~~uns~~ developed? A Well there is one third of the whole developed. That is it has been prospected and claimed as mines.

Q Why does it not show itself on the assessment rolls of the County?

A I am not running the County. I have told you that I do not know. I could not for my life tell you that.

Mr Dibble I object to that. It is irrelevant and immaterial and not in cross examination.

Mr. Gooden Q Do you know what the mining property of El Dorado County is assessed at?

A No sir I do not.

Q When you speak of the undeveloped 150 000 000 do you include the quartz mines? A No sir

Q And the cement mines?

A Yes it is all together and there has a new mining sprung up there of late years - seam mining. I mean the whole wealth of the mining district of El Dorado County.

Q You are not taking in the whole of the County? A Yes.

Q But a moment ago you said you didn't take in that part of the County north of the South fork?

A I mean that portion - I told you that portion

that I form my judgment upon was what I seen and then what I recollect to have heard - taking it all together the quartz and the seam and the gravel

Q How many acres of ground do you put this \$150 000 000 under?

A I put it under the mining portion of the County

Q How many acres?

A I could not tell you the number of acres per

Q You could not tell whether it was a thousand or five hundred thousand?

A I know it is over a thousand

Q Tell us how much over a thousand?

A I know it is over a thousand. I could not tell you any amount, what the number of acres is

Q What did you mean

by saying there were 300
stamps in operation
in El Dorado County?

A I mean there are
over 300 stamps in El
Dorado County

Q How many quartz
mills are there that
you know of in El Dorado
County? Just name them
name the mills

A You want the quartz
mills first?

Q I want the quartz
first? A Well we will
commence near Georgetown
there is the Sinton(?) Mill
there. I could not tell you
the names of all those
mills. It would be im-
possible for me to tell you
the names of all of them
then there is the Huntington
Battery at Greenwood.

That has 20 stamps
and there is down on that
side a mill that belongs
to a man that was a

rapper. That is all the name I know for him. He has five stamps

Q How long is that divide?

A I am telling you about the stamps

Q I want to know how long and wide that divide is before you go on the other side of the river?

A Well it is in a slope of about ten miles down the river

Q How long from East to West? A It is about 5 miles East to the next place. That is up at Kelsey. They have five mills. There are five mills on the direct line going South now. I have the thing mixed up. I mean this: ten miles East and West. I am going straight South. This old man that I mentioned, I do not recollect his name, has a mill. Whitesides

has ten stamps coming
 down Johnstown Creek.
 Then there is a mill that
 has been running for a
 number of years I do not
 know the name but everybody
 knows the mill. That
 has got ~~the~~ ten stamps
 and then you come to
 Peterson's mill at Coloma
 That has ten stamps
 then there is a mill at
 Gold Still, the Kimball
 Mill. That is a ten stamp
 mill and then you get
 up towards Placerville
 and there is a five stamp
 mill at Whitewoods. It
 belongs to the Ward Company
 Now coming down that
 ridge the next is the
 Gregory Company a ten
 stamp mill and then
 next is the Benfield
 which is a ten stamp
 mill and then the
 Robinson mill they call
 it on the Lyon Mine

That is a few stamp mill
and then there is the
Compans mill on Lyon
Hill. That has few stamps

Q Is that quartz?

A I am talking about
stamps and I will
tell you what is quartz
and what is gravel

Do you want them separated
as I go along - do you?

Q You are doing the
talking

A I did not know whether
it was I or you. Now
there is the Dickerkhoff
that has 10 stamps
and then there is the
Pacific that has 20.
It has two elephant stamps
which equal 10. The
Oregon has few, the
Grand Victor mine has
50 and now then at
Asheville there are two
mills, I do not know
their names 10 stamp
mills. The old Havilah

has 40 and I think they
call one the Pocahontas.
I do not know the name
of it but I saw the mill.

Q Does that enumeration
include the quarry?
A Quarry and gravel
together

Q Those are all you
know of? A No sir
there are not all I know
of

Q Now then the St Laurence
is a 20 stamp mill.
I can't think of the name
of another mill over
there while is a few
stamp mill

Q What is the average
distance —

A <Entg> Wait a minute
until I see if I can find
some more. We are not
pressed for time

Q I will give you a
week to do it then

A Give me a little
time. The Arctic has

the stamps. I cannot remember now of any others. Yes I can - there is a two stamp mill in run. That I forgot that is all that I can remember now

Q Is that all?

A I do not know whether it is or not because that would be very hard to say

Q Have any of these mills declared dividends in the last 5 years?

A That I do not know sir. I could not tell you that. I am not interested in those mills

Q Have they not been as a general thing disastrous?
A No sir

Q Do their owners?

A No sir. There has been money made in the mills

Q Take the St Lawrence

A I do not know how that has been pecuniarily

Q Take the Grand Victor?

A The Grand Victor has paid from and can hear - I could not tell you how much it has paid -

Q Have not about four fifths of those mills failed?

A No sir they have not

Q Have any one of those declared a dividend in the last five years to your knowledge?

A I do not know. I could not tell you whether they have paid one - from hearsay

Q Do you know how much gold they have produced? A No sir

Q That is what I supposed: that you did not know

A I do not know what gold they produced

Q You do not know how much gold any of those mines produce do you?

A Yes I do, some of them

Re direct Examination
E. H. Evans

Mr Libble Q Did you mention
 in your estimate the Stamps
 of the Rosencrantz?

A No sir

Mr Badwalader Q What is
 the average distance of
 these mills from the
 American river?

A The average distance?

Q Yes. A I could not
 tell the average distance
 There are some sixty of
 them cement mills that
 tail into Weber Creek?
 and the American river

Q What is the average
 distance of those mills
 that you have mentioned
 from the American river?

A Well they will average,
 the whole of them — do
 you mean where the
 stream would run into the
 American river?

Q Yes the ravine?

A Yes. It is about 28 miles by the water course they will average 20 miles

Q The average is 20 miles. as some of them are and some are further up

W. H. B. B. are those mills situated upon the water sheds of the river?

A Yes.

Q Did you mention the Rosenerantz in your estimate? Also is

Q How many stamps?

A The Rosenerantz has got 20 stamps. I said I could not remember them all.

Q The Jopher?

A The Jopher has 20

Q The Chapporal?

A The Chapporal has 20.

Q The Pequini?

A 10 stamps.

Q The Lyon? A 10

Q The Newton?

A It is a 10 stamp mill

Q The Berger?

A I mentioned that mill at Iowa Hill, I could not think of the name

Q Do the tailings from those stamps ever have referred to pass into the river? A The tailings pass in yes.

Mr. Adams Q Into what river? A Into Weber Creek first Mr. Dibble You say that the tailings get into the river from those mills? A I do

Q. What river? A The South fork of the American river

Q A question was asked you in reference to the tailings or the material contained in certain mines, in which Counsel asked you the question as to whether an injunction would affect it and he asked you to remember it?

Algeo.

2. State why the tailings
 could not get into the river?
 A Because the hydraulic
 tailings are so heavy
 that they do not get into
 the river

Mr. Cadwalader Subject
 to that. Mr. Dibble went
 into that matter, and I suppose
 examined in regard to it

Mr. Dibble Why will it
 not get into the river?

A I say because it is so
 heavy and dense that it
 don't get into the river

2. State what you mean
 when you say that it is so
 heavy and dense that it
 don't get into the river and
 therefore can not be affected
 by an injunction. Is that
 what you mean? A Yes

2. Is it the same charac-
 ter of material that exists
 in the gravel channels at
 the present time

Mr. Cadwalader Subject
 to that, it is leading.

2 What is the Character
of the material remaining
with reference to the Char-
acter of the material
that you spoke of in re-
ply to Mr. Cadwalader
that would not go into
the issue

Mr. Cadwalader I object
to the question on the ground
that it is leading and not
in direct Examination.

The Court sustained the
objection

Testimony

Hyton Powell.

Called for defendant.

Sworn.

By Mr. Byrnes Q. Where do you reside, Mr. Powell?

A. Placer County, Michigan Bluffs.

Q. Since what time have you resided in Placer County?

A. Since 1852.

Q. What has been your business during that time?

A. Mining, staging and farming.

Q. Between what points where you staging and during what time?

A. From the town of Auburn, the County seat, to Michigan Bluffs from 1865 to 1881.

Q. What is that distance?

A. It is called 30 miles the near route.

Q. I understand that you are proprietor of the stageline between those two points?

A. I was at that time; I am not now.

Q. You are not now?

A. I am not now.

Q You were up to 1881?

A Yes sir.

Q Is that correct?

A That is correct.

Q Did you during any of that time personally superintend the operations of your stagerline?

A I did, all the time I owned it.

Q ~~Well~~ all the time you owned it?

A Yes sir.

Q State to the Court what your opportunities of observation have been since, to the condition of the ~~country~~ country there and particularly during the winter seasons in reference to the erosion of the hillsides and the washing away of the surface of the country there?

A Well during the winter season snow and rain flood a great deal of the surface matter off, wash the surface there very heavily.

Q Describe it a little more definitely, if you please, because Judge Temple has probably never been there.

A Well it is a high elevation

and streams have great depression from elevations and the soil is of a light matter, the surface of it decomposed, cement and vegetation etc. and easily cut up by wagons and stock or otherwise and there comes on those heavy rains and floods it off in masses and accumulates from all quarters and concentrates into the natural drainage of the country and passes off into the rivers.

Q. Speaking of masses, in how large masses have you seen it pass away at times?

A. Well, I have seen the accumulation of water, and mud, and snow that accumulated among those natural water-courses, five or six hundred inches of water along big streams and carrying sand and everything with it.

Q. Running where?

A. Running into the natural grass towards the rivers.

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Q. Along the sides of that ridge

how frequently do cañons or very abrupt ravines occur?

A. Well almost a net work of them comparatively as numerous in those mountain countries as the fibers are to a tree or limbs).

Q. What is the usual grade compared with its ravines or cañons that discharge into the rivers?

A. Leading from the summit to the river?

Q. Yes from the summit upon both sides to the rivers, one to the Middle Fork upon the one side and to the North Fork upon the other side?

A. Well, it is hard to estimate the exact grade upon ~~which~~^{each} tributary, ravine or cañon as it might be, but to give you a general idea, they vary in their length and the courses they run to the river sometimes. I think that at the average altitude of the ridge above the rivers, take the average from the junction

up, it would average 15 or 16 hundred feet of altitude in a place — probably the ridge will average 10 miles wide from the junction to the terminus of those two rivers.

Mr. Clark How many feet high, sixteen hundred?

A. I should say safely it would go 16 hundred feet. There are places where it will measure 3000 feet from the river to the altitude, but taking an average of it right through —

Mr. Byrne. You think the average would be sixteen hundred?

A. I think so; that is my judgment in the matter.

2. From the time you first commenced to ascend the ridge which way is the grade?

A. The grade runs from the east to the south — from the east to the west — we commence from west and travel eastward and it is on the rise all the way up till we get to the junction

of the summit.

Q. Is gradual increase of grade?

A. A gradual increase of grade all the way with the exception of a backbone or something of that kind, a depression that might break in the mountain, but the general altitude is an increasing one as you go east to get to the summit.

Q. I will ask you to take a look at this map and see whether it correctly represents the Middle York of the American River and the North York and the ridge as it increases in width going eastwards towards the summit?

(Referring to Allard's map.)

A. This is the Junction and this is the river (referring to the map.)

Q. According to your knowledge and experience of that country, how correct a representation is that?

A. Well that is very accurate according to my knowledge of

the country.

2. How much further east than any point, indicated upon this map would the summit of the Sierras be? There is Thumbey Creek, do you know where Thumbey Creek is?

A. Yes sir, the summit would be from there perhaps 35 or 40 miles further east; that is, take the center of the ridge lying over the surface.

2. I am requested to call your attention to this map, which shows the whole country.

(Wilde's diagram shown.)

A. I have followed the southern branch of the North Fork and crossed the summit to this lake Tahoe.

2. I will state to you that the blue dot line represents the line of the watershed of the western summit of the Sierras?

A. Yes; I understand that. Well, I have traced that river; that is, I have not been the whole meanderings of the river, but I

have been to the junction repeatedly; I have also inspected it at many other points, and from the point known as the Soda Springs, I have made a preliminary survey across that mountain, taking that watershed crossing, the main summit of this lake. I afterwards located a survey on this ~~as~~ other river the Middle Fork.

Q. Let me ask you for what purpose you made that survey?

A. That survey was for pack mules and saddle horses and cattle, etc., during an excitement purported to have been discovered along the region of Lake Tahoe.

Q. What year was that?

A. That was in 1861 or 1862 somewhere along there - 1860, 1861 or 1862; I do not remember exactly the year, but along about that time. I afterwards built a trail on the headwaters

of this across the summit leading down into what is known as the Squaw Valley and from there on to Lake Tahoe.

2. Upon that divide, which lies between the Middle York and the North York of the American River, how many miles of travel road do you say there is?

A. In that area of country?

Q. Yes. A. Well, sir it would be a matter of guess work, but I would not put it at less than 15 hundred to 2 thousand miles, including trails and all - taking all the roads, log roads and all kinds, in the whole country between those two rivers. They go in every direction - pack trails and everything else. - Trails, I suppose, are considered roads - considered in that light, because all those several points, upon those rivers here in the summit, each and every bar - almost, has a pack trail, leading from those several trading

points to those rivers, which supplied them in early times: And then the main summit is cut up with roads; they run from the junction here to the summit; and there are immediate roads, of every description, from every point of the compass, you might say.

Q. I understand you to estimate length of the roads, in that particular section of the country at 1500 miles?

A. I would not put it any less than that as my judgment.

Q. I wish you would describe, to the Court, the condition of these roads, in the latter part of the dry seasons, with reference to their erosion or dust? How deep is the dust on those roads, say in the latter part of the year before the rains come?

A. Well, where it mostly prevailed, it gets to be deep dust:- I should say from six inches to eighteen or twenty inches

in places. It cuts up into deep holes sometimes.

2. It cuts down into deep holes?

A. Yes sir, and it makes the road very rough.

2. I understand you to say that the main roads run principally upon the summits or upon the the back bone of the ridge?

A. Yes sir, the main roads.

2. What is the character of soil there?

A. Well, the soil is of a light reddish; still some portions of it are a deeper red than others, while others are a darker brown — the deeper red is somewhat inter-mixed with hard, clay matter, but it cuts up very readily; but the most of it is a light, brown soil, brownish — between the brown and red.

2. Are there any other causes, than the travelling of wagons, and vehicles over the roads,

which contribute to the cutting up of the surface of the country, there within your knowledge?
 A. Yes sir.

2. State what they are?

A. Well, it is the raising of stock. There is a great deal of stock raised in that country, horses, cattle and sheep driven from the valleys here, from the valley farms in the summer time by the thousands. They are driven clear up to the summit and over the summit in fact, lots of them.

2. And by what route would they return?

A. They returned that way, those that go that route generally return that way. Sometimes they return by way of Eldorado, and some few of them again, if they get caught in there, late in a storm, on the western slope of the mountain they go out by way of Truckee. I know one party that has been caught there several times and come

out by way of Suckee to get to the railroad through that way to save crossing the mountain. Q. You have said that there were thousands?

A. Yes sir, thousands.

Q. Can you state how many thousands?

A. No sir.

Q. Generally, I do ~~do~~ not expect you to give it definitely?

A. No sir, I could not state how many thousands, because there are different parties that drive horses, cattle and sheep. I am personally acquainted with a number of them and they have stopped at my place on the route there.

Q. Give the Court an idea of some of the largest bands of sheep that you have seen there, as to the numbers?

A. Well, the largest band that I know, that went in there, of course I took the ^{man's} ~~amount~~ words for it — he told me he had 2500 in that band that he was driving.

Q, How did his statement correspond with your observation at the time?

A, Well they looked to be very numerous; there was a large band of them; I did not take pains to count them.

Q, How many such bands have you seen in those mountains there?

A, Oh, I have seen three or four different bands in the summer, three or four different bands belonging to different parties; and then, in addition to that, there are bands of cattle belonging to a great many parties and ~~hundreds~~ ^{others up in} the hundreds sometimes.

Q, Speaking about sheep, did I understand you, correctly, to say that you have seen three or four such bands driven over the mountains, in one season?

A, Yes sir.

Q, And how often does that occur?

A, That occurs every spring, ~~that~~ after the grass commences drying up here, since I have

lived there.

Q. Now, about the cattle?

A. Well, the cattle commenced at the same time of the year, in the spring of the year - the horses, and mules, and anything, that wants feed in ^{the} spring, that they can drive; they go from small bands to large bands, several hundred head of cattle at a time.

Q. Several hundred head?

A. Yes sir.

Q. About how many head would you say?

A. Well, sometimes two or three hundred head; sometimes 50; sometimes 75; I have had in my field there, I guess 125 or 130 head.

Q. They differ in size of course?

A. Yes sir, at different times.

Q. Now, when the snow falls, can these cattle remain upon the high Sierras there?

A. Oh, no sir; they return them generally home to get out there by the 20th. of October, returning back in the valleys here where

they have good feed for them
or dry grass that they have re-
served or something of the kind.

2. How low down upon that
divide, I mean now with refer-
ence to the confluence, near the
Middle Fork of the American
River, do you have severe frosts in
the winter?

A. Well, we have severe frosts
clear to the junction.

Mr. Hunt. The junction of what?

A. The Middle and North Fork.

Mr. Byrne. 2. How far below that
do you know?

A. Well, we have severe frosts
in Auburn and, I rather think,
it begins to lay up along down
towards Pine, and Rocklin and
Newcastle. I have never lived
down in that country, but
judging from the temperature of
the air and atmosphere, it begins
to lay up; it is not so severe.

2. What effect do these severe
winter frosts have upon the
surface of the ^{earth} surface upon
these mountain sides?

A. Well, it has this effect:

If the frost comes, when the ground is saturated with water, it expands it and heaves it up.

Q. How high?

A. Oh, from an inch to four or five inches - well, I presume, many, who have been in ~~these~~ freezing countries, know the effects of frost on the land.

Q. That condition of affairs extends all over these mountain sides?

A. Yes all over.

Q. What is the effect of a warm rain succeeding a severe frost of that character?

A. If there comes a warm rain on it, it peels it off and runs it into the cañons, etc. so far as it will run, dissolves it and floods it away according to the volume of water that it has to contend with.

Q. And where does it go from there?

A. From the cañons?

Q. Yes sir.

A. It must go

the rivers. I have never followed it, but I presume it goes ~~along~~ⁱⁿ the river; it is the only reception for it that I know of.

2. That is, necessarily?

A. Yes sir; it is the natural watershed I suppose.

2. Following the severe frost, and particularly if there is a warm rain for a few days, describe, to the Court, the condition and appearance of every little depression, and rivulet, and stream, upon ~~upon~~ these mountain sides?

A. Well, in that condition, after a heavy frost and a general thaw and an ~~season~~^{abundant} rain, you will find all those streams running comparatively full of muddy water, as something like a tail race will be running from a mining claim.

2. That map before you is, I believe, what is called a topographical map? Yes sir.

2. I will ask you to look at

it and express your opinion, to the Court, as to how correctly it represents the depressions upon the mountain sides there; I mean the numerous ravines?

A. Well, that is a very correct representation as far as I can say from what I know of the country. I do not see that it misrepresents the country.

Q. You drove the stage over that ridge for 20 years, did not you, nearly every day?

A. Not quite 20 years - well, I staged it some time to that.

Q. You travelled over it?

A. Yes.

Q. You know the country then do you? A. Yes sir, I was staging in ~~the~~ earlier days than that, from Todd's Valley to Yunklee Jones for probably two or three years in early days; but the ~~last~~ staging, I did, was from 1865 to 1881 over that route I spoke of, from Auburn to Michigan Bluffs.

Q. Now, as a matter of fact, there

thousands of these ravines discharging muddy water into the rivers, are there not during rains and particularly after a frost?

A, Yes sir; no question about; the whole country is intersected by ravines to the river courses just like a net work.

2. You expressed it like the branches of a tree.

A Yes sir; as near as you can compare it. Take the slopes of the hillsides, from the rivers, any long distance from the river, say half way up the river or two thirds of the way to the summit, there are more in proportion than there is in the river from the simple fact that they branch out and throw the little fibers, leading from the main divide, you know, and concentrate in the larger cañon which empties into the river — well, it is just like going over these fingers, you know, *(illustrating)* over this ridge and down in this deep.

gully etc. It is a perfect network of watercourses.

2. You said that, during the time you have spoken of, you have been always interested in mining in that locality?

A Yes sir, I have been interested in mining; I do not know of any one time, during my great residence there, but what I have been interested in mining in some shape or other.

2. You have been interested, I understand you?

A Yes sir; I commenced mining in the first place.

2. To what extent are you familiar with the amount of material, that has been, and is now being, discharged from the mines of that divide, as compared with the natural wash from the surface of the country from the various causes that you mentioned?

A. That is at the present time ^{and} a few years past, you mean right along?

A Yes sir. You may divide that

up so as to inform the Court fully. — Begin at the earliest period, if you please, and divide it into any convenient periods of time that you see.

A. Well, taking the hydraulic wash upon that divide, what is called so extensive as many other size localities, I should say from the natural drainage of the country and the washings of the country including all the land slides and roads and everything of the kind, if the matter which comes off from the natural elements, were deposited, each year in the vacuum that the mines make, they would fill it, three or four times the amount that the mines would wash out — the hydraulic mines.

Q. Let us see, if I understand you on that. You say that the material which is removed by the natural causes, which you mentioned, if put back in the pits or spaces that have been washed out by hydraulic mining, would more

than fill them up three or four times?

A. That is my judgment, yes sir, taking that whole area of country, taking the land slides and all the causes of upsetting the ~~surface~~ surface of the lands, roads, trails and the stock and what little cultivation, etc. - that would fill up the cavities, which the mines sluice out as it is, 3 or 4 times if it could be settled right in the same cavity - it would fill up those spaces in that proportion - it would fill them up and have that residue left.

Q. That is, it would fill up 3 times as many spaces as actually existed from hydraulic mining?

A. I think so.

Q. Now, in reference to landslides, describe some of these?

A. There are some very large ones there.

Q. How large?

A. Well, a great number of

acres.

Q. Numbers of acres?

A. Numbers of acres, yes sir. In places there are some old slides there that show probably 50 acres where they have slid into the river.

Q. How many such?

A. There is one that passed off about two years ago; that must be in the neighborhood of 10 acres; that, I have stood on; I did not see it go, but I went right on to it and saw it, after it had gone, and I took a general observation and it came very near taking the family away; it did catch their goats; it buried up all their goats and the goat house and their chickens.

Q. Do you know what the causes of these land slides are?

A. Well, the only cause that I could allege for it is in those immense storms, the rain storms, they have always occurred at such times. We never have them in the dry season, no.

such slides as that.

2. When the earth becomes thoroughly saturated.

A. When the earth becomes thoroughly saturated and full of water and it gives away, and away it goes and it buries trees and everything that comes before it.

2. What about snow slides?

A. Well, in some localities, I presume, there are a great many. However I have never experienced any of them myself.

I wish you would describe, a little more definitely, the extent of these land-slides because I want to know in order to realize the amount of material that comes from that source as discharged in the river?

A. Well, the slides around in the vicinity of the bluff, they are numerous; they vary, all the way, I should say, from ~~a~~ ^{half} ~~foot~~ an acre to some as much as 50 acres that have moved.

2 How high up the mountain side do they extend?

A well, some will go there near the top; I never saw one run clear to the top of the summit yet; that is, to the high summit. There is generally a first depression and they start from that first depression of the high summit; and as a rule, all I have seen on the first depression from the main summit is more generally and then it comes down to a bench and then the depression goes off much steeper into the river.

2, Do they not sometimes occur where there are no benches at all but where the mountain side is almost as steep, as you described it, 50 or 60 degrees?

A, They do that very often; but I am speaking of the general feature of the country. The first depression is not so steep; it decreases, after you descend, near the river.

2 What effect does a large band of

sheep have in the destruction of vegetation upon the surface of the soil, if you know?

A. It has this effect.

They take the grass and underbrush that they consume and cut it up with their feet, and they leave it comparatively as bare as the street, all cut up into dust.

Q. What is the consequence of that when a heavy rain follows it?

A. Well, the consequence is, that by the destruction of this vegetation, grass, underbrush and fibers of fringes etc., being taken up from the ground, the water takes hold of this loose matter and sweeps it off.

Q. Is there in that country any such thing as we know as a sod or turf, a firm stratum of grass?

A. Not as a general rule; there may be a little of a turf or sod in some natural, springy place for probably a great deal space, but the land as a rule don't contain any sod matter like it used to at home.

Q. It is easily washed away?

A. It is easily washed away.

Crop Examination of.

Peyton Powell

Mr. Hunt. When did you first
commence running your stage
line between the points men-
tioned by you? a I think
it was in 1865 if I remember
correctly

Where had you resided before
1865? a Before, I had
resided at Jodds Valley, made
it my headquarters from 1852
up to that period, and in that
year I moved to a place
about 5 miles below that
a ranch I bought, and
lived there until I quit
staying

2. A point 5 miles south
of Jodds Valley?

a South west it would be

2. At Jodds Valley what
occupation did you pursue
or at the point south of
Jodds Valley?

a While I lived there I

was staying and farming,
and at the same time inter-
ested in mines.

2 Was your farm on the
line of your stage road?

A Yes, I made that the
center station.

2 How many acres of land
were you farming there?

A Well, I presume about
100 acres under steady cul-
tivation.

2 How were you cultivating
it? A Plowing it and
sowing it.

2 Were you giving your
farm your personal super-
vision during that time?

A I did.

2 Which did you do, drive
the stage or attend to the farm?

A I attended to the farm
and supervision of the stage,
principally. I did not
drive very much myself,
sometimes I drove a week or
two at a time owing to some
driver being sick or disabled.

or something of that kind, but as a rule I did no driving.

Q But remained at your farm?
A Remained at my farm looking after my interests of the staying and the interests of the little farm.

Q Did you ever during the time that you had that stage line for any considerable time drive yourself, or drive the team - drive the stage line for any considerable time or drive on the line?

A On the line I think from 2 to 3 weeks, is the longest I ever drove at any one period.

Q Do you remember any number of times when you drove as long as three weeks?

A Could I identify any time?

Q Do you remember any considerable number of times when you did drive as long as three weeks?

A I probably never drove during that period to exceed

2 or 3 weeks at a time, not more than twice and that was while one of the drivers had a severe spell of sickness, and I drove for him, that is I took his place rather than put on a new man, and kept him

2 Do you remember of driving at any other times a trip now and then?

A Yes Sir, occasionally

2 Not oftener however than once a month, did you?

A Not as a rule, no.

2. During what part of the day did you stage run?

A Well Sir, they run subject to the railroad somewhat

2 Was not the greater portion of that trip always performed in the dark? In the night time?

A. In the summer time for a portion of the time we left there on the arrival of the East bound train, which would be about 5 o'clock

2 In the afternoon?

A Yes sir, returning in the morning for the Schock and then subject to the changes of the railroad.

2 So that the most of the trip was performed in the night time? A At that time of the year.

2 That is in the summer time? A The winter time, the winter schedule is this, we leave Auburn at Schock

2 In the evening?

A In the morning, and leaving Michigan Bluffs at Schock in the morning which is the schedule time now and I am running on that time.

That commences from November 1st and extends to May 1st, that is what is termed the winter schedule.

2 Does you go in the day time and return in the night then?

A No sir, returned in the day time leaving at each end of the road.

a I told you.

2 At 8 o'clock?

a Yes sir, two stages

2 Each stage made the route every other day then?

a No sir, each stage made the trip every other day, say for example, this morning take an illustration, one stage comes out of Auburn at 8 o'clock and one stage comes out of Michigan Bluffs at 8 o'clock, they meet at 12 o'clock at the center station which was my old home, thereby the line is operated in the day-time during that period of time and it has been that way for a number of years.

2 That is in the winter time? After sir

2 In the winter season your time was exclusively almost devoted to farming was it not?

a In the winter?

2 Yes sir! a No sir.

2 How much of your time was devoted to staying in the winter time?

A Well, my principal attention was devoted to staying

2 That is to the stage house, and the management and the supervision of the line.

A Yes Sir

2 How often did you pass over the road during the winter? A Oh well, that is a hard question to answer, I very frequently came pass from Auburn to Michigan Bluffs. My family lived at Michigan Bluffs several years, 5 or 6 years prior to my quitting staying, I went over that portion of the road every week.

2 But the other portion you only went when you went on business? A When I went on business. That is the worst portion of the road in the winter season, the

appurtenance of the route

Q. During the time of your residence there have you ever seen the time in the winter or in the summer, when the mountain streams were clear?

A. In the winter time?

Q. Winter or summer?

A. Mountain stream?

Q. Yes Sir? A. Yes Sir, I

have seen the mountain stream in the summer, in the low stages nothing but pure spring water, clear, in the winter time as a rule they are muddy.

Q. The American River, have you ever seen that clear since 1852, either fork of it? A. I can not say that I have, Sir.

Q. It has always carried a great deal of mud, summer and winter?

A. There is more or less mud, that is, it is colored, more or less colored every since that period.

Q. It was colored very thoroughly was it not, in the summer and the winter time?

A. It kept up about the same coloring.

Q. Summer and winter?

A. Yes Sir.

Q. By observing the water as it passed along, could you make any estimate of the amount of material that it carried in suspension?

A. No Sir.

Q. No man could, could he?

A. That would be my judgment.

Q. Do you know how a person could determine the amount of material carried in suspension in a river?

A. Well, I could suggest my plan but whether it would be accurate or not, I do not know.

Q. It would have to be by experiment at any rate?

A. It would have to be a practical experiment that is the only way.

2 The coloring of the water ordinarily comes from clay, some times the oxides of iron coming from the mines, some times from the top soil, is not that a fact?

a There is no doubt about that-

2. And a greater portion of the material, that is the sand, whatever proportion there may be of it, rolls on the bottom, and adds nothing to the color of the water, is not that a fact?

a Well, we find sand and light material and all shades and colors, if it is suspended in the water and floats in it, it probably will give it its color, and it will carry the color of it.

2 Provided it floats near enough to the surface?

a The coloring matter extracted from the mineral contained in the gravel, colors the water, we take it for

franted, it colors the same
 as undye comes color a batch
 of water for clothes, but
 we find when we dip up
 that muddy water for an
 illustration, to dip up a
 bucket full or a dipper
 full and set it down, what
 is the result? We frequent-
 ly find it will settle clear
 itself in time and we find
 a sediment there composed
 of matter which was sus-
 pended and floating in the
 water.

2. That is you find the
 sediment that was in the
 top of the water, the top
 of the stream, the upper sur-
 face of the stream?

A We take it just as we
 take the water as it flows
 along, we take a dipper
 full or a bucket full or a
 tumbler full.

2 Right of the top?

A Yes, we get that matter
 which settles in it and

that is the only conclusion
we can come to

2. Then you come to the conclusion that it is?

Whether that gives it the color of the stone, I leave that for you to decide

2. But you come to your conclusion then from taking a test of the top of the water instead of going to the bottom also, and ascertaining what heavier material may be rolling on the bottom of the stream or floating in suspension near to the bottom of the stream?

Well, there is no question but what the heavier matter lays on the bottom or floats on the bottom if it floats at all no question in my mind about that.

2. That is the heavier material floats near the bottom? a yes sir, that is a matter of fact.

2. But you never taken any

Experiments to ascertain what
if anything was floating
in Suspension near the bot-
tom of the American River?

A Noen, I do not know
anything about that.

I you spoke of the roads
in the mountains there, and
you say that there are about
1500 to 2000 miles of roads
including trails?

A That would be my judg-
ment. Yes sir.

I What proportion of those
roads including trails would
be trails? A Well, I would
say 300 miles may be less
and may be more. There are
a great many trails that
lead from the main divide
down to all these several
mining points on the river.

I Those trails are simply
frequented by footmen, some
of them on horseback?

A Yes sir, and mules for
the packing of goods and
supplies to miners.

2. Well the dust that you get, comes mostly from the operation of wagon wheels on the surface of the road, rather than from the traveling of footmen over the trails or even mules. Is not that the fact?

A I will admit as an illustration that a wagon and horses and mules, oxen and sheep will create more dust than you or I walking along on the same road.

2 That is not the question. I will ask it in this form. Is it not true and is it not your experience that trails that are followed by footmen and by persons on horse back in the mountains where there are no wagons, or rather packed down than made looser?

A Not in the summer time, they get mighty dusty.

2. Where you find from distance old roads, old paths, old

trails along the side of a
 mountain or even in a
 valley at any place, do
 you not always find that
 where there has been travel
 over them in the Spring, Sum-
 mer and winter, that the
 effect of that travel has
 been to pack down the dirt
 rather than make it more
 easily washed by the surface
 water passing over the
 soil?

A. Well, we
 find it in this shape just as
 you illustrate to a certain
 degree, in drying up the
 mud of the winter and
 spring, after the winter
 has passed and the spring
 come along, the dry season,
 for a period the travel smooths
 over the road and packs it
 down, until it is as nice
 to ride comparatively as that
 counter to run your wagon
 and horses over.

9932 But where there are no
 wagons and horses?

All well, Either one, I will
 make the illustration —
 as soon as the ground wears
 out sufficiently and
 animals commence cutting
 it up, in proportion to the
 travel the dust accumulates
 wherever the matter is
 soft enough if it is
 not over solid rock,
 it is all corresponding
 to the amount travelled
 over

2 Do you remember any
 trail that is travelled by
 horsemen and footmen
 in those mountains, where
 any considerable a-
 mount of dust has
 accumulated?

A Yes sir

2 That is where there
 is no wagons.

A Where there are no
 wagons, yes sir, I can
 cite you to one.

Q Where is it?

A I was on a portion of it prior to this fall rain, that is the trail leading from the town of Michigan Bluff by the way of Deadwood and down to a town called Last Chance

Q How deep was the dust in that trail?

A All the way from a half inch to 4 or 5 inches in the localities where the matter was soft enough.

Q Is there not a great proportion of the Mountain Country there over which these trails were running which is composed of bed rock without any covering soil?

A Some portions are as I said before

Q Is there dust there?

A No sir. It will cut up into dust except where the rock or material is so hard that it will not

Q This same thing applies also to the other roads.

A large portion of the roads travelled by wagons, a considerable portion of it is on bed rock without any soil covering them are they not? A Well ~~on~~ the main line of the road on the ridge there is no bed rock but when you get off of the main line of the ridge and undertake to cross the stream it is then in a depression deep enough to reach the bed rock. The graded road then cuts through to the bed rock. The dust on those grades, the harder portion of the earth is not so intense as it is where the soil is susceptible of being cut up although there is more or less dust there.

① The dust you find on these roads is ordinarily the result of the cutting of the wagon wheels is it not that is the great proportion of the dust?

A The most of it is cut by the wagon wheels or the teams drawing the wagons

Q In the early days of this state in 1855 and 1856 or 1860 - Or at any rate during the Washoe and Virginia City excitement there was a great deal more travel over those roads than there has been for the last five years was there not?

A During the Washoe excitement
Q Yes and the Virginia City Excitement?

A Well on our divide there probably may have been a little bit more but the most of the travel did not go to Virginia City on that route. It was not a practical route for freighting or anything of that kind

Q But the route was over this drainage - the American River was it not through Elavado County?

A Through Elavado County?

O Yes?

A Yes. I have never been over the route but I have been informed that that was the route, they freighted over there and also by way of Dutch Flat for a while. O At that time there were hundreds and in deed you might say thousands of loaded teams constantly crossing these mountains on there way to and from Virginia City. A That was the general report I have been into Placerville and into Diamond Springs and Mud Springs during that excitement and I have seen a great many teams loaded and travelling in that direction. purported to be loaded for Virginia City and that Country in there. That is all I can say about it.

O Have you ever been over these roads that these teams travelled over

A No sir Not only that portion say from Placerville to Diamond Springs and Mud Springs and Shingle Springs. I have been over that portion.

Q How much greater was the population of the Country from 1851 to 1856 or 1858 than it is today and has been for the last ten years?

A Well it was a great deal more but exactly what per cent I could not tell. It was a great deal more I know from the simple fact that I remember during that period we polled more than ten times as large a vote in the town of Fords Valley than we do at the present day.

Q And that would be a fair proportion you think

A Yes I think the town has fallen off in that proportion

Q During the time of this great population there there was a great mining excitement and considerable travel over

Those Mountains was there not?

A Yes

Q Running back and forth from place to place?

A Yes

Q They were prospecting the mountains and the different claims?

A There were a great many people prospecting and mining on the Rivers up to that period and on the hills.

Q And running tunnels etc

A Yes and about that time there was an excitement known as the Frazier River excitement and the people took a general Stampede.

Q Was there a good deal of staging through these mountains during the time of those years of prosperity?

A This same line that I operated for this period of years that I state was running at that time and one summer there were four stages running into the town of Yankee

Jims - One from Iowa Hill
 One from Michigan Bluff one
 from Todd's Valley and one from
 Auburn. They concentrated
 there. Now at the present day
 this one line supplies Yankee
 Jims, Todd's Valley Forrest Hill
 and Michigan Bluffs; That
 was one summer I think -
 One summer it existed.

Q Are the roads that are now
 travelled, the roads that were
 travelled in during those days
 A I do not see that they have
 diminished or extended any
 They followed the same old
 road.

Q At that time they were
 travelling over the soft top
 soil?

A Yes on the main divides
 and the grades where it
 intersected the Canyons was
 over the bed rocks.

Q The soil had not been beaten
 down by travelling on it but
 it was the natural top
 foamy soil easily susceptible

to the fear of animals and the wheels of wagons ?

A They commenced of course with roads upon the surface of the earth and as they continued to travel they continued to wear from year to year

Q Of course the wear, the wash the erosion would be greater from the immediate top ~~and~~ than it would be after you went down further

A I do not think there is any doubt about that. The surface of the earth is more light.

Q And it is not beaten down as much as after it is travelled ?

A No sir

Q Were there flocks or herds of animals of any kind then run through those mountains

A In those early periods ?

Q Yes ?

A More or less all the time that I have been there.

Q Cattle sheep and Goats ?

A Cattle Sheep and Goats
 O Horses?

A Horses and Mules

O So that the Natural wash
 in the early days was
 necessarily greater than the
 Natural wash of the last
 ten years?

A No Sir I do not think it
 would be greater than it
 has been in the last ten years.

As the Country gets older
 the Vegetation that the Cattle
 and Sheep and Horses destroy
 gives vent for more Material
 to pass off than in the early
 period.

O I am speaking of the
 Natural wash resulting from
 roads and highways and
 the pulverization of the Soil
 by Animals travelling over it.
 It was greater?

A In proportion to the Matter
 which was out during that
 period probably the Matter
 being lighter would pass
 off probably in a greater Volume

but as I say as the Country gets older and the Amount of stock is increased and the more Vegetable Matter is severed it certainly increases the Volume of matter floated off. I cannot look at it in any other light

Q How long do you say you have been farming this piece of land of yours

A I commenced if I am not wrong in 1865 and quit in 1881

Q How much stock have you had on your farm how many kinds of stock

A How many different ones in that time?

A Yes?

A It would be impossible for me to answer that question

Q You say you commenced when?

A 1865. I had on hand my own all the way from 30 to 50 head of horses and Cattle and sometimes Mules and stage horses, Colts, Etc

And those bands that I have reference to are bands that travel in the Spring of the year for feed and they return in the fall

Q Do you usually have one or two of these bands on your farm each year going and coming?

A Yes

Q Sheep horses and Cattle
A Sheep horses and Cattle
They will average more than that. They sometimes put up with me and some times with my neighbors.

Q Your farm is the usual place is it not?

A It is a very good drive for stock and I have more pasturage for the accommodation of them and better water privileges than some of my neighbors for such droves of Cattle.

Q Do you manage to consume all of your pasture there each season?

A Yes.

Q How long have you been ploughing the number of acres that you mentioned — I believe 80 or 100 acres.

A I said about in the neighborhood I think of 200 acres.

Q How long have you been ploughing that?

A Well I commenced ploughing when I first settled there.

Some years I would not plow the whole of it. I would make one ploughing raise two crops.

Q You would have a Volunteer Crop?

A Yes. For instance I would take a tract of land a field and summer fallow it — what we term summer fallow, that is to plow it well and deep in the spring of the year in the latter portion of the rainy season and let it lay and rot all summer and sow it early in the fall. Then I would get two crops off of it.

O So the stock that come there usually come on the roads until they arrive at some place to rest during the night and then go to a pasture some pasture that is convenient in which they are permitted to run }

A In this particular locality the divide there is narrow and this ranch which I have reference to which I live at, the fences to the fields went down to the banks of the Rivers the North and Middle Forks thereby leaving no pasturage except the rough craggy hill sides and the brush and they could not camp out. They want to put their stock in a field or a corral where they can get the water easily and where they would not have any trouble in hunting them up but as they ascend into the mountains further they camp out. When they return in the fall I let

them turn there stock into the field where there is water and where there are fences all around and they can keep there stock concentrated and they can start early in the morning and get across the Rivers.

Q They never let there stock run or range in the mountains if they can help it - I mean when they are travelling

A They could get fields or Corral at Fortess Hill for instance but when they are driving there stock into the mountains they go out on the Commons and they camp and let there stock feed upon the public domain. They do not propose to buy any more feed or to buy hay at those expensive figures - any more than they can help.

Q That is after they get up where there is no danger of losing there stock

A Of Course that is what they

are going after - foraging!
 Q And when they get them there they keep them there until they eat off the vegetation, the grass. That is when they are seeking pasturage, but when they get into your neighborhood do they not always stop there at nights and confine their stock within some enclosure A not always.

Q If it is possible they always corral them? }

A As a rule they do confine them in a corral or pasture if they can. However I have known of some bands of sheep that camped at a point this side of my place but that does not occur often.

Q How steep is the descent from one side of your land down to where it joins the River

A How steep?

Q Yes.

A You mean what would be the elevation from the River

to the top of the hill?

Q The elevation from the River or how much grade per rod?

A What is ~~about~~ the ascent from the River up?

Q Yes

A Well it is about 2000 feet to the river - either one of them perpendicularly

Q Your land is on a side hill

A It is right on the divide between the two Rivers. It is only about from 8 to 9 miles above the real junction of the two Rivers

Q How deep is the soil on your place if you know

A I do not know how deep some of it is. I would plow into the red rock in places

Q And some places it is deeper?

A Some places deeper. I never went through it.

Q How much of your soil has been washed off by natural causes since you

have been farming?

A I never measured it Sir

Q Has any Considerable portion of it washed off

A There is one field there that I have ploughed and the ploughed land from year to year has washed off and passed away until it has come to the Cementy matter of the Ridge and I cannot raise anything more on it.

Q How large is that?

A There is about 50 acres of that.

Q And all of it has washed off

A No Sir Not all of it

Q That is where you would strike the Cement with the plow

A Yes. Sometimes I would plough along and there would come a heavy rain after I quit ploughing - a heavy drenching rain and where the water would concentrate it would move the whole matter that was turned over with the plow. I have seen it

leave the impressions of the plow share and you could go along and count every furrow. The land that was ploughed up was moved down the hill

Q This portion was very near the bed rock?

A Yes the bed rock or Cement

Q You had been farming that amount of land since 1865 that is 17 years

A 1865 to 1881 how much does that make?

Q To 1882?

A I quit in 1881

Q That would be 16 years

A Yes about that

2- I will ask how you can estimate the amount of material that goes into the streams by the hydraulic mines in the basin that you speak of there?

A- In the immediate basin?

2- You spoke of a basin? You were speaking of a basin - the basin of the American River I understood it to be including it all?

A- If I understood that question properly it is like this: you want to know on what basis I figured as to what amount had been hydraulicked and what is the natural wastage of the country?

2- How did you determine the amount of material that has been cast into the streams by hydraulicking and other mining in the basins of the three Forks of the American River?

A- I do not know as I have ever determined that

2- Have you come within

ten hundred million cubic yards of the amount that has been cast into the stream.

A- I would not make any calculation. What I said is a matter of my own judgment. I have never made any calculation. I think it would be beyond the comprehension of man to make an estimate of the matter which you speak of.

Q. It could be made by taking the different mines and calculating the number of cubic yards that have been thrown out of those mines?

A. Well by a practical illustration of it and a good deal of labor attached to it a man might arrive at some accurate conclusion.

Q. You do not know anything about it?

A. No Sir I do not pretend to know anything more than my natural judgment would tell me.

Q. How can you estimate

the amount of material cast into the streams by the natural washings in the three Forks of the American River?

A- The quantity?

Q- Yes? A- I can not estimate the number of cubic yards or anything of that kind. I know there is a great deal of it. And taking the whole laze of the country I know it must necessarily deposit a large portion of the matter.

Q- Now then if you can not estimate in your own mind the amount thrown in by hydraulic and other mining and you can not estimate the amount that has been thrown in by the washings, the natural washings, how can you compare the two amounts neither of which you know?

A- I will tell you how I compare it. I see now exactly the point you want I think. Taking the hydraulic

lic washings and the amount of chasm it created by the washing and the natural drainage during the Winter and the area of country, the watershed taking in the land slides and all, I think the matter if it was set in the chasms made by the hydraulic mines would fill them up three or four times but I have no practical knowledge.

Q- You have no basis upon which to found such a judgment but it is simply your general belief, is not that a fact?

A- That is a fact. It is nothing more nor less than you and I here should dispute and I should say to you I believe it is four hundred feet to your stake and you would say I think it is five hundred feet and we will wager the best on it and we would measure it and I would get

away with the beer or you would.

Q- You would not make that bet before you measured?
A- Yes.

Q- When did you see or know of a land slide in the neighborhood of Michigan Bluffs?

A- In the neighborhood of Michigan Bluffs?

Q- Yes? A- I never seen a land slide moving myself since I have been in the country.

Q- How do you know that one occurred there?

A- By the knowledge of others and from the side which I saw broken from the mountain. I saw a tremendous one that came down in 1861 or '2. I did not see it, I never saw one break loose, but I saw the track of it.

Q- You saw what you judged was a landslide in 1862?
A- Yes.

Q- Have you seen anything since that time that indicated that there had been any landslides in that neighborhood since 1862?

A- Right in that neighborhood?

Q- Yes? A- I have not seen them myself but I have heard the Miners speak and tell of various ones.

Q- Did you know the nature or condition of that country where this large land slide occurred. Did you before that land slide occurred?

A- No Sir. I never was on there.

Q- Did you know whether there had been any mining going on there?

A- I did not but I rather believe not from the nature of the country. It is a rough country and it showed no signs of any inhabitants whatever.

Q- Do you know whether there had been any turn-

ing there?

A - No Sir. I do not.

Q - Is it not a fact that landslides ordinarily occur along the lines of miners ditches and where tunneling has occurred or where excavations have been made by miners?

A - Not as a standard rule by any means at all. There are a great many landslides through the mountains where there never has been a tunnel run and no ditches or no mining. I have seen the traces of them where they have flowed down through the mountains - say God's quantity of them and there never was a ditch or tunnel or no mining ever done there.

Q - Those are old slides?

A - Some are old slides and some are new. For instance you can see in the mountains after the snows melt say God's quantities of them where there has been no mining.

Q- Is it not a fact that a great many of them occur in places in the County where miners ditches exist and where tunnels and excavations have been made?

A- There are more or less of them I will admit
Q- Caused by mining?

A- I do not know. Sometimes mining may have done it and sometimes not. I can sight you to one instance at a place where there was a ditch that I used to be interested in. That ditch crossed on the side of a hill and it broke loose for acres, and it took the ditch, trees and all - it took down trees three or four feet through and moved them bodily and it twisted the ditch out of its line and broke it.

Q- Did you ever stop to consider how many miles of road fourteen feet wide and washed fourteen feet

deep it would take to fill up the pit of the Cold Run Mine? A- No Sir.

Q- There are four millions and a half or nine million cubic yards?

A- I never figured on that.

Redirect examination of Payton Powell

Mr. Byrne You spoke of the effect of rains upon your plowed land, on the farm that you are cultivating between Auburn and Michigan Bluffs?

A- Yes.

Q- You stated that the land washed away to a greater extent where it had been plowed? A- It did.

Q- How many farms are there upon that ridge? which have been cultivated similar to yours or about

how many?

A. Well from six to eight probably ten. I do not know exactly how many.

Q. How extensive are they?

A. Well they vary all the way from one hundred and fifty to two hundred acres and some I guess in the neighborhood of three hundred acres.

Q. Land that has been cultivated and plowed every year?

A. Yes. It is plowed more or less every year.

Q. What effect do the winter rains and the other causes you have mentioned, have upon those other lands?

A. It had the same effect as it did upon mine, on the same grade and altitudes—land that was so situated.

Q. How deep from the surface did this cultivable land wash off?

A. Well where the altitude is sufficient it will wash off

to the depth that it was plowed each time and where it was not it did not.

Q- I do not know how deep that is, state it in feet or inches?

A- In that region we generally plow from six to eight inches.

Q- Each season?

A- Yes each season.

Testimony of Anthony Clark

Called for the defendant. Sworn.

Mr. Dibble Mr. Clark, where do you reside?

A- At Forrest Hill Ariz.

Q- When did you come to California?

A- In 1854.

Q- What has been your occupation since you came to the State?

A- Mining.

Q- Where have you been engaged in mining?

A- At Forrest Hill

Q- Where is Forrest Hill with reference to the Forks of the American River?

A- It lies on the divide between the North and Middle Forks.

Q- What is the length of the Forrest Hill divide?

A- Well I do not know I should judge it is from seventy five to a hundred miles long.

Q- Where is the upper end of the divide with reference to the summit of the Sierras?

A- Well I suppose about Lake Tahoe or the Meadow, what we call the Meadow.

Q- Where does the divide terminate with reference to the Forks of the American River?

A- Near Auburn.

Q- At the junction of the Middle and North Forks?

A- Yes.

Q- What is the average width

of that divide?

A- I could not tell very well.

Q- Approximate?

A- I should judge it was about ten miles wide, the average width.

Q- Above the North and Middle Forks, how high is the backbone of the divide?

A- In what place, at what particular point.

Q- Average? A- Well I should judge it was about from fifteen hundred to eighteen hundred feet.

Q- What is the length of the Middle Fork of the American River on that divide?

Mr. Goodwelder That would be impossible to tell.

A- Well I should judge it was about one hundred miles.

Q- What is the length of the North Fork of the American River upon that divide?

A- I should think about the same.

Q- What is the character of the land with reference to the drainage of it into the Middle and into the North Forks?

A- Well the grade goes each way and there are a number of deep cañons in the middle, tributaries.

Q- What is the depression with reference to the effect of natural washings upon it in the direction of the North and the Middle Forks?

A- The natural wash is very great.

Q- What I am getting at is, as to its slopes contributing to the natural wash? To what causes has the natural wash on that divide between the two hundred miles of stream and fifteen hundred feet high been attributed? Mr. ~~Lead~~ Lead Walace I object to that question as it contains

two or three predicates and it is full of suggestions.

(The Reporter read the question)
Mr. Dibble Or how has it been effected?

The object of the question is to show the peculiar character of the land with reference to the ease of the natural wash upon it - that is that it must naturally wash to an enormous extent.

I want to show how that country is situated with reference to the effect of the water and the melting of the snow upon it. I want to show that it is not a plain but that it is a high backbone between two long streams.

The leant If it is 1500 feet high it would naturally follow. He has stated that it lies between two streams that it is 1500 feet high and he has given the width of it.

Mr. Dibble State whether the Map of the American River describes, presents the topography of the ridge that you refer to and point it out on the Map if it does?

The learner Look on the Map and see if you can find the ridge that you have been talking about?

A. Yes I recognise it.

Mr. Dibble Point out the ridge?

A. Here is the junction of the North Fork - it comes up there (indicates). This is Shottail. This is the deep canon that I spoke of, that branches of 2 - Now is that divide with reference to a network of ravines and canons that carry the wash?

Mr. Leadwala I object to that question, it is suggestive.

Mr. Dibble Is it not a network of canons and ravines?

A- I do not know that I understood that question.
(The Reporter read the question)

A- Well it is a perfect network all over, clear up to the back-bone.

Q- What is the population of that divide at the present time?

A- Well that I could not tell exactly.

Q- Approximately?
Mr. Leadwalacler - I will agree that the census of 1880 will show it, that will show it.

Mr. Dibble That will not show it.

The Witness There are three or four thousand people there

Q- What was it in 1870?

A- I should think there were three times as many there.

Q- What was it when you went there in 1854?

A- Well there were a good many more there then

2- What has been and is the business of the people on that divide?

A- Mining.

2- State the name of the principal places on that divide & the Forrest Hill divide?

A- Paddy Valley, Yankee Lins, Forrest Hill, Bath, Michigan Bluffs, Sunny South, Damascus, Iowa Hill, Wisconsin Hill, Monono Flat, Deadwood, East Chance and Canada Hill.

2- What has been the production of that divide in gold if you know?

Mr. Leander Aladen I object to that. It calls for a guess by a person not shown to be a statistician.

The Court We can give some idea as to whether it is great or little.

A- Very great.

Mr. Ribble How great?

A- I judge about fifty

millions of dollars.

Q- Are you acquainted with the business of mining so as to make an estimate of the value of the gravel claims as to production?

A- Yes.

Q- What gives you that knowledge.

A- Practical experience and what I have done.

Q- What remains to be taken out of that divide in gold?

A- Well my idea is that we have not but commenced to prospect the divide yet.

Q- To what extent do you mean with reference to the amount remaining?

A- I do not know as I understood the question.

Q- In comparison with what has been taken out how much remains to be taken out?

A- Well I do not think we

have taken out over one third of it.

Q- That would have been much?

A- That would have been hundred million of dollars.

Q- Up to 1876 what was the character of the material that was removed in taking out the sixty million of dollars that you speak of? Up to 1876?

A- Well the ravines and little canyons were all dug up.

Q- Was the material that was mined out and displaced prior to 1856 light or dense material as a general thing?

A- Generally light, surface diggings.

Q- What was the depth of the washings up to that time in this light material that you refer to?

A- Well all the way from a foot to ten or twenty feet. Some were deeper. Some were as deep as thirty or forty.

2- What is the character of the material remaining in the open worked surface minus there are that divide with reference to what it was prior to 1876. Is it denser or not?

A- Well these banks that were worked off in the cuts naturally sloped down.

2- The question goes to this point: is the material remaining to be worked heavier than the material that was worked prior to 1876? A- Yes.

2- What percent of that material that is to be worked hereafter will remain at the dump?

A- A large portion of it remains there, of this blue cement.

2- Why does that large portion of it remain there?

A- It is so much heavier than the material that was washed previously.

Q- What proportion will remain immediately at the dump?

A- Well I do not know what you mean by the dump there.

Q- The discharging place, where it pours itself over and forms its own grade?

A- Suppose they dump into a cañon it goes down the cañon into the River.

2. What proportion of that material rests within two miles of the discharge point
 A. Well, it would most all rest within two miles, but we have to put flumes in to carry it off down the canon

2 Then I understand you that it nearly all would remain there, if it was not for the fact of putting in the flume to carry it further? A. Yes sir

2 How far does the flume carry it further on?

A. I should think from a mile and a half to two miles

2 Then I understand you that a very large proportion of it remains within two or three miles of the place whence discharged from the mine? A. I should judge so.

2 How large is that proportion? A. It dumps

off into the middle Fork
of the American river.

Q What proportion of that
material comes go five miles
from the place it was dischar-
ged?
A I do not know,
I should not think very
much of it.

Mr. Cadevalader. Never mind
if you do not know.

The Court. If you do not
know anything about it Mr.
Clark say so.

A I do not.

Mr. Dibble. How far are these
dumps from Sacramento City
by the way of the river, the
forks of the river?

A. This dump where we
dumped into the river is
about - I do not know
the distance from the junc-
tion to Sacramento, but from
the junction up, I should
judge it is about 25 or
30 miles.

Q From the junction up?
A Yes sir.

2. You do not know how far it is from the junction down to fair avenue?

A No sir.

Mr. Cadwalader We will not disagree about that. Mr. Dibble I am not asking for an agreement or disagreement, I want to get the knowledge from the witnesses and put it on record. Are there any stamp mills on that divide? A Yes sir.

2 How many stamps?

A In one mill?

2. All? A I do not remember. I only know of 2 mills that I remember of.

2. Two stamp mills?

A Two sir.

2 That all? A That is all I think of at present.

2 How many stamps to each mill? A Ten stamps to one and five to the other.

2 You have described the character of that divide

with reference to length,
width and elevation. Now
describe the natural wash
outside of the mining wash
from that ridge into the
forks? A well, I
have stated it was very
great.

2 From what source?

A well, from these roads,
cattle tramping over the
country, and land slides.

2 Describe the land slides?

A well, in the rainy sea-
son the land slides off from
the side hills, we have
different kinds of land
slides there.

2 Describe them?

A In 1861 and 1862 we had
some large slides there that
commenced moving and they
are moving yet, they move
every season gradually mov-
ing. There are other slides
that come right at once
clear down to the river.

2 State the extent of some

of them? A well, I
 shined them from 20 to 25
 away.

2 What depth?

A Well, from 10 to 80 feet
 deep.

2 How many of them of
 the character which you refer
 to, of the size you refer to?

A The largest ones I shined
 them, 5 or 6

2 Explain the wash or
 erosion beside the land
 slides from other causes?

A Mining

2 Outside of mining — do
 not include that?

A I do not know that I
 understand you, Judge?

2 The roads, the denuding
 of the land, the cultivation
 of the land, the construction
 of ditches, the breaking of
 ditches, the filling in of
 ditches, and every thing of
 that kind?

A Docks and the plowing
 of the land, and all these

things, cultivation

I Explain the effect of frost
in Sifting down material
from the sides of the mountain.
A It is very great.

I assume it to be a fact,
Explain how great it is?

A In instance I have
got my ditches there, Every
Season when the frosts come
we have to clean them out,
some times they get $\frac{1}{3}$ filled
up with the dirt that falls
off of the sides caused from
the frost mostly, and the
drying in the summer and
the frosts and rains.

I with reference to the
roads and the denuding
of the land of timber, what
is the effect on the wash
on that divide?

A Well, it is very great,
immense.

I Compare the natural wash
at the present time with
the natural wash of 1850
1855 and 1860, as to extent.

is it greater or less?

A. No do you say?

Question repeated

A Well, I was not here in 1850

Mr. Cadwalader That don't make any difference - the answer would be just as good as if you had been here

A. I think the natural wash increases every year
Mr. Dibble To what extent would the natural wash which has occurred since 1875 fill the excavated parts of the mms on that divide?

A Well, I should think it would fill them three or four times if it could be collected.

2 Three or four times greater than the excavated displacement? A Yes sir

3 What is the length of the roads on that divide?

A All the roads?

2 Yes sir, all the roads

A well, I should put them at 1000 or 1500 miles. It is only an estimate.

2 What is the effect of travel over these roads with reference to wash when the rain comes? A well, they get all cut up in the summer time, very dusty and it is washed off when the rains come.

3 In the summer before the rain comes what is the depth generally on these roads of the dust? A well from 6 inches to a foot deep I should judge a great many places, and holes deeper.

4 At what time does the rainy season terminate?

A well, at different times.

5 Give the average?

Mr. Cadwalader He says he doesn't recollect.

A. I should judge about April and March.

Mr. Dibble How long then does the dry season continue?

during which the dust is accumulating in these 1000 or 1500 miles of road?

A Well, generally until about November or December, sometimes January.

Q State the length of the ditches on the divide?

A. The length of the whole of them?

Q All of them?

A. Well, to estimate I should judge that there are 200 miles.

Q State the size and storage capacity of the reservoirs on this divide, if you know?

A. I do not. I know of one or two small reservoirs that don't amount to much.

Q By whom were the ditches constructed?

A Different parties.

Q What class of parties, miners or farmers?

A Miners.

Q How many mining claims are there on that divide?

about how many if you know.
 Q If I had an opportunity
 I could count them up

Mr. Cadwalader That is a
 matter of record. They have
 got the record. You can not
 take up a mining claim ex-
 cept by a particular way
 Mr. Dibble How many miles
 are there in that divide?

Mr. Cadwalader The witness
 is asked something that is
 a matter of record and he
 is asked to take a wild
 guess at it. Now if there
 are many many claims
 there let him produce the
 necessary locations.

Mr. Dibble. Mining claims
 don't depend on United States
 Records.

The Court. The witness can
 tell if he knows

Mr. Dibble About how many
 mining claims are there in
 that district on that divide,
 I refer to the Forest Hill
 divide? A There are a

good many mining claims
that are not on record.

I well, about how many
would you put it at within
your own knowledge?

Mr. Cadwalader I object to
that until it appears that
the witness is willing to
state that he knows.

Mr. Dibble Are there 50
100, 500 or a thousand or
how many are there?

A I should say 100
Mr. Cadwalader I move to
strike that out as a guess
The Court. Do you know any-
thing about it?

Court Yes sir, I know a
good deal about it.

Mr. Dibble You put it then
at 100? A If I had
time I think I could count
them all up.

I have not ditches been
constructed for the purpose
of working the mining claims
which you refer to
Mr. Cadwalader That is true.

testimony will make necessary the enumeration of these claims by this witness. We say it is not legal to drive us into these long examinations. This is all a matter of record.

The Court Go on.

Mr. Debbles, state whether the ditches that you have referred to 200 miles of them were constructed for the purpose of working these iron mining claims which you refer to? A Yes Sir.

2 Name the extensive mines on that divide?

A I do not know that I understand the question, you mean how is the work by the hydraulic process of mining or drifting?

2 I mention repeated
A Well, the Li the Pond Co,
the Emma claim, the San
Francisco, the Big Spring,
the Dardanelles, the Green
Spring, the Hope, the Baltimore

the New Jersey, the Arno,
the Paragon Company, the Baker
Divide, the Keown & Co. I do
not know that that is the
name of the mine - the Haz-
ard that is the name of it.

Q Where do these mines
dump? A These that I
have named?

Q Yes sir. A Into the
South Fork of the American
River, that is they are
dumped into tributaries that
lead into the Middle Fork.

Q Why do they so dump,
is it the law of necessity,
or not?

Mr. Cadwalader I object to
that.

The Court. That is suggestive
Mr. Dibble Why do they so
dump, explain the reason
why they so dump?

A If they did not have
a place to dump they could
not work there.

Q Any other place to dump
except where they do dump

A No en

Crop - Examination of

Anthony Clark

Mr. Cadwalader. It is said
by the last witnesses that
all the business of that
divide was done by one
stage. 4. That so?

A By one stage?

Q By one stage?

A Well, the stage runs there
it don't do all the business

I well, has that divide
Communication except with
one stage - Except by one
stage? A That stage
carries the mail

Q Well, answer my ques-
tion now, the first question
I have asked you?

A No en

Q Have you got more than
one stage running there?

A No en. We have not.

Q That is what is called

a mud wagon is it not?

A No sir

Q What is it?

A A coach

Q How long have you been down to one stage?

A I do not think there was ever any more since I went there

Q Do Wells Fargo & Co maintain their office on that divide now? A Not for Bullion

Q They were obliged to withdraw them were they not over a year ago?

A I was going to say that we send packages by Wells Fargo

Q But they have declined to carry Bullion from that divide for over 2 years haven't they? A About that time

Q Have you any idea what the population of Placer County is?

Mr Dibble I object to that a not crop-examination

The Court. I suppose you want to get at the population of that divide

Mr Cadwalader Yes Sir, Have you any idea of what is the population of Placer County? A No Sir, I do not remember

Q Do you pretend that that divide has got $\frac{1}{3}$ of the population of Placer County?

A I do not know.

Q Has it got $\frac{1}{10}$ of the population of Placer County?

A I do not know that.

Q What vote is polled on that divide? A I do not know that I can give you an estimate

Q You say that there were 3 times as many people on that divide in 1870 as now?

A I should judge there was 2. That is the population has been reduced that much since 1870? A Yes Sir

Q Where does the snow band commence on that divide?

When do you find snow there
in March, in the month of
March say? A There is a
difference in the seasons.

I well, I know, but as a
general thing, about how far
from Tadda Valley?

A In the month of March
I should judge you would
have to go up about 6 or 8
or 10 miles.

Q The snow gets very deep
as you get up toward the
summit doesn't it?

A Yes sir.

Q The mountains get to
be about 12000 feet high
don't they? A No, I do
not think they are

I well 10000?

A No sir.

I well, what is the height
of the mountains there?

A I do not know exactly
I should think about 8000
feet.

Q The country east of what
is called the Baker ravine

do you know a name of
that name - do you know
where Birdy Valley is?
A Yes sir

2 The Country East of that
is all covered with snow
in the winter is it not?

A East of the Baker Savina

2 Yes sir A Well, it
depends a good deal on the
season, on the winter

2 But the general season?

A The general season it
is covered with snow.

2 And it is uncovered by
the melting of snow?

A Well, when the snow
first comes there sometimes
comes a rain storm and
takes it all off and prob-
ably it is covered two
or three times.

2 And when it is covered
in winter, it is uncovered
by the melting of the snow?

A Yes sir

2 That is a very heavily
timbered country is it not

A It has been
 2 well, it is now?

a No, not so heavy.
 There has been a large amount
 of it cut off.

2 There has been no lumber
 shipped from the divide here
 there? after all

2 Where from?

a Well, from the Sugar Pine
 Mill

2 Has that been a large
 or a small quantity com-
 pared with the lumber cut
 on the railroad divide?

a I do not know anything
 about the railroad divide

2 Have you ever been over
 that railroad?

a Yes, over which
 railroad

2 Over the Central Pacific
 RR?

a I have never
 been any further than Dutch
 Flat.

2 Do you know the ex-
 tent that timber has been
 cut on that land?

A Noen' I do not

2. Your forests are nearly
virgin forests are they not?
I have got the best timber
in the Sierra Nevada mountains
have you not?

A Well, I do not know that

2 Do you know any better?

A Noen' I do not

2 Well, the trees are all
standing there are they not?
the larger pines - such pines
as are not cut down are
standing. A Yes sir, those
that have not been cut
down are standing

2 If you do not see any wash
from the roots do you?

A The roots of the trees?

2 Yes sir. A Some places
you do.

2 Well, but a general
thing, the roots of the trees
bear the same relation to
the original soil that they
did 20 years ago?

A Well, you can not see
any wash.

2. You can not see any
wash at the base of the
tree — those trees all grew
didn't they, since that
country was carved the way
it is? Sculptured the way
it is? a I don't know

2 Can't you tell that?

a No sir

2 Seeing a tree growing on
the hill side with the roots
all covered, can't you tell
whether that tree grew be-
fore or after the country
was formed?

a I should judge it grew
after it formed.

2 Don't you see the pine
leaves and the pine cones
around the base of those
trees? a No sir

2 Don't they remain all
winter and all spring?

a In some places they do

2 No, but not all places?

a No sir

2. Could not that be notice-
able by anybody that went

up there, the cones lying just where they dropped from the trees? A some places where the ground is level it might be so.

Q Take any place on that divide where these pines grow.

A No sir, not on that steep hill side.

Q And don't you see the mat made by the falling pine leaves right around the trees?

A I have seen pine leaves lying around some of the trees where the ground was tolerably flat, but take it on the steep hill side -

Q Anywhere on that divide?

A No sir.

Q Is not there a very heavy undergrowth on that divide? A Some places.

Q Well, in nearly all places? A No sir.

Q How is it that you get up to the North Fork above Jomart Hill?

A Down toward the river.

Q Yes sir, are you going from the top of the hill toward the river? A I do not think I ever went up to that

Q Well how is the distance down toward the Middle Fork, what kind of undergrowth do you find up there?

A Oh, there is some Chaparral up there and underbrush

Q Well, what is Chaparral made of? A Manzanita and different kinds, but it is not very thick, you can ride around there

Q Is there grease wood?

A No sir - you can ride around on horseback anywhere there

Q When you get up that divide 30 or 40 miles what kind of a country do you come to?

A Well, there is grease wood and some underbrush up there

Q Where does the son

disappear as you go up that divide? A It does not disappear

Q Is not there a section of the country up there that is all granite?

A No, not as far as I have been

Q Did you ^{ever} go down any of those hill sides?

A Yes sir

Q Say 20 miles above Iowa Hill? A Yes sir

Q Didn't you find a very thick undergrowth?

A Some places.

Q Could you find 100 acres on that divide that way not covered thickly with an undergrowth?

A Yes sir

Q Could you find 100 acres

A Yes sir

Q Is it not a distinguishing feature in all that hill side and all those Cañon sides, the undergrowth?

A No sir

2. Can't you let yourself
open into almost any
of those canyons by means
of the underground?

A No sir, where it is a
timbered country the under
brush is generally pretty
scarce.

2. I am not talking about
that, but I am talking
now about the river and
the ravine side?

A Well, you said on the
divide

2 No, I am talking now
about the river and the
ravine side?

A Yes sir

2 It is all undergrowth
is it not?

A No sir, not always

2. Well, substantially all?

A Well, there is consid-
erable there

2. Well, you would find 200
or 300 square miles of it
there wouldn't you? A Noosi.

2. You could not find any
place where a grizzly bear
could not scramble itself?

A Yes sir, you can find
such places as that.

2. But as a general thing?
A As a general thing, it
is not all covered with
underbrush.

2. Do you know any part
that is not? A Yes sir.

2. Where? A Well the
underbrush don't begin to get
very thick until you get
up above the Secret House
in the neighborhood of the
Secret House there.

2. Then it gets very thick
does it? A Yes sir,
in some places it is very
thick.

2. A person could not begin
to go through, coming up the hills
could he, without a good deal of trouble?
A Yes sir, he could get over it

Q That would be hard work wouldn't it - he would wear his clothes all to pieces?

A I was surveying there last Spring and we walked all over the top of it.

Q Now I will ask you about the growth of young pine. Is there not a very heavy growth of young pine in all that County?

A No sir there has been but a fire burnt them all up.

When? About 3 years ago. I think the young timber is all burnt up.

Q But before then it did not burn all over that divide did it?

A Nearly so. It has been burnt several times.

Q But three years ago it did not burn much

did it? Oryles is that was the first worst fire we had, I think it was either 3 or 4 years ago

Q Is there any road in that country which is not purely local?

Oryles is

Q Where? A Any amount of them. All these timber roads

Q They are local roads are they not? A Well I suppose they may be called local roads

Q There has been less travelling up there per square acre than any other part of the mountains?

A I should judge by the looks of the roads that there has been a good deal

Q Well what population is there up there after you get up to Bakers Ravine? A Well there is all the Somerset people

Q How many do they number? A I judge there must be 100 people up there 125 or 130

Q There is only one road in that divide isn't there? A Yes sir there is any amount of them

Q Well I mean there is only one road up to the divide? A Yes sir there is more

Q And the others are all lateral roads, that is roads branching from the main one? A I do not know what you would call the main road Q Do you suppose 3 persons a week travel on that divide on Iowa Hill A Yes Q Doing what? A I think they are travelling every day in the summer time Q Three persons? A Yes sir sometimes

Q Do they run any stage up there? A Not that I know of

< Recess until 9.30 tomorrow morning >

In the Superior Court
of the State of California
in and for the County of
Sacramento

The People of the State
of California
vs.
The Goer Run Ditch
and Mining Company

Morning Session
Wednesday
January 11th 1882

Transcript of Testimony
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Winfield J. Davis
Official Reporter

In the Superior Court
of the State of California
in and for the County of
Sacramento.

The People of the State of California	} Morning Session Wednesday Jan. 11, 1882.
vs. The Gold Run Ditch and Mining Company	

Testimony
of
Anthony Clarke

Cross-examination resumed.

By Mr. Badwalades. Q. What is the average width of that divide west of Damascus?

A. I think about ten miles.

Q. Just look on that map there and see whether you have not about doubled it?

A. This map! - it is about ten miles. (Referring to Wilde's map.)

Q. That is, as the road travels?

A. Yes sir and the slope of the hill down to each river.

Q. It will average about five or six miles, will it not?

A. No, sir I think it will average about ten. Of course it is only an estimate; I could not say positively.

Q. You were speaking last night about the undergrowth?

Ayes sir.

Q. That is very heavy, is it not?

A. Some places, considerable.

Q Well, on the banks of those streams?

A. No sir,

Q. Supposing you stand at the top of the hill and look up the middle Fork, can you ~~say~~ see anything except grass-wood and cheniseel on the banks?

A. Well, there is considerable brush; it is not all covered by a great deal.

Q. The trails will have to be cut through the brush, don't they?

A. Sometimes they do.

Q. Well, what I wanted to get at was this: that brush remains

there winter after winter, don't it?

A. No sir; it has been burnt up several times, the whole of it.

Q. It gets burned out?

A. Yes sir.

Q. But it don't get washed out - that is what I want to get at?

A. Well, some of it does.

Q. Well to a great extent - you said there was 1200 miles of road on that divide?

A. Yes, I think I did.

Q. That would reach about 200 miles beyond Salt Lake, would not it?

A. Well I do not mean to say that it would, all one straight road.

Q. If it was straightened out it would reach beyond Salt Lake - the roads ~~would~~ ^{are} all west of Damascus, are they not?

A. No sir; there are roads all over it.

Q. All the winter roads are west of Damascus?

A. Well, the winter and summer,

both,

Q. All the roads in the country, under a level of 6000 feet, are west of Damascus, are they not?

A. I do not understand you.

Q. Well, Damascus is about opposite Emigrant Gap — about 6000 feet high, is it not?

A. I think it is; I do not know exactly where Emigrant Gap is.

Q. Well, there is no travel in the winter east of Damascus, is there?

A. Yes sir.

Q. For what?

A. Mining purposes.

Q. To where?

A. To Last Chance, Secret and Canada Hill.

Q. Well, how far is Secret Ravine off — is there any travel of any consequence east of Damascus in the winter?

A. No sir not much.

Q. Not any to count. Can you name 50 miles of wagon road

in that County?

A. Yes sir.

Q. Well, now commence - I will ask you where does the stage line enter the divide?

A. It enters it at the junction of the North and Middle York.

Q. And it runs up the divide?

A. Yes sir.

Q. To what point - I mean the stage line?

A. Well, you can get up with a wagon as far as Canada Hill.

Q. How far is that from the junction?

A. About

50 miles on the road.

Q. How much of that is travelled in the winter, of that 50 miles?

A. Well, the principal travel is up as high as Damascus.

Q. How far is that from the bridge crossing near the junction of the middle York?

A. About 35 or 40 miles.

Q. Well, it is 35 or 40, or is it 30?

A. I do not

know exactly; I should judge about 40.

2, Well, now how far above the mouth of the junction of the Middle Fork, does the road cross?

A, Well, there are hundreds of roads crossing.

2, I am speaking of the stage road now?

A, Well, there are roads that lead to Yankee Jims, Todds Valley and Iowa Hill.

2, No; that is not what I am asking you — how far above the junction is the road crossing the stage road crossing?

A, Well, what we call the principal roads is the roads ~~of~~ that divide up to the main road, and there are ~~four~~ principal roads leading off at different places.

2, I am asking you about the stage road crossing, how far above the mouth of the Middle Fork — the road from Auburn to your divide — you

do not appear to understand?

A. No, I do not.

Q. How far is Todd's Valley from the mouth of the Middle Fork?

A. I should judge about 18 miles.

Q. Is there any population to speak of on that divide below Todd's Valley?

A. Yes sir.

Q. Any mining done there?

A. Where.

A. There is mining all the way.

Q. In every mine all the way. Just state some one place, where there is mining?

A. They commence about Butcher Ranch.

Q. Mention one place, where there is mining going on?

A. Butcher Ranch.

Q. Well, how far is that from the junction of the Middle Fork?

A. About eight or ten miles, I should judge.

Q. Is that a hydraulic mine?

A. Yes sir.

Q. How much water do they use?

A. I do not know.

Q. Glad you been there of late years?
 A. Well, that is ^{the} way we come down every time we come to Auburn.

Q. Well, is it a large or small mine?

A. It is a pretty large mine.

Q. Well ^{how} do you call pretty large?

A. Well, I do not know.

Q. Where do you live?

A. Forest Hill.

Q. Just put your finger on Forest Hill on that map.

A. The witness points on Wilde's map.

Q. Now, I will ask you whether substantially all the claims, the names of which you gave to Mr. Dibble yesterday and which you stated were the principal mines around within five miles of Forest Hill up and down the divide?

A. All the principal mines?

Q. Yes, the principal mines named by you to Mr. Dibble on yesterday?

A. I suppose ~~the~~ named a

great many mines.

Q, answer my question, whether the mines that you named to Mr. Libble yesterday are not all within five miles of Forest Hill?

A. Well, I could not tell how many I did name now.

Q, Does that apply to all your testimony? State whether any of the principal mines on that divide are more than five miles from Forest Hill?

A. Yes sir.

Q, What ones?

A. Well there is the Damascus.

Q. The Damascus, what other?

A. There is a claim down on the river near Butcher Ranch, what they call the Seam Digging.

Q. What other?

A. These are the principal ones, these are more than five miles away from Forest Hill.

Q. The others are all within five miles?

A. No sir, there is a large

amount of claims up at Last Chance; there are some at Desert and Canada Hill a good ways from Forest Hill.

Q, you do not recollect the principal mines that you named yesterday, do you?
A not all of them.

Q, Now I will put this question to you; State whether or not three quarters of all the mining is not done within five miles of Forest Hill, on that divide?

A No sir.

Q What is your business?
A Mining.

Q What kind of mining?

A Drifting at present.

Q What is your claim?

A That I am drifting in now.

Q Yes sir?
A They call it the Orno.

Q Do you know whether hydraulic mines are working?

A Yes sir.

Q Do you know how high the principally hydraulic mines on that divide are above the

Middle and the North Forks?

A. The depth of the bank?

Q. No. How high the bedrock of their plains is above those rivers?

A. Well, I can estimate it. I should judge it is from a thousand to fifteen hundred feet.

Q. Well, their tail races are all in the direction of those streams are they not?

A. Yes sir the most of them.

Q. What grade are they set?

A. Well, they vary.

Q. As a general thing?

A. As a general thing from about four inches to twelve inches to the twelve feet.

Q. Why do they set them so high as twelve?

A. To get the dirt washed off.

Q. To wash the heavy material?

A. Yes sir.

Q. Well, now these are tail races with rough bottoms are they not or blocks in the bottom or stone in the bottom?

A. Some of them.

Q. Well, what other materials do they use?

A. Some of them run down the gulch where we empty into -

Q. I am asking about the tail races?

A. Well, these are what we term tail races.

Q. Well, there they use the bed-rock, do they? ~~Yes~~ Sir?

Q. Now, you are talking about there using the bedrock. I am speaking of the tail races where they catch the gold. Do the hydraulic mines up there have tail races or do they not?

A. Some of them.

Q. Well, how do they catch their gold if they have not tail races?

A. They have flumes in.

Q. Well, that is a tail race, is it not?

A. I do not know what you term it; they run tunnels in and put flumes in there to wash through.

Q. What grade are the flumes set?

A. They run from

four to twelve inches to the twelve feet.

2. How far is it from the end of those flumes down to the river, what would be the elevation?

A. I should judge from a thousand to twelve hundred feet.

2. In what distance would they make that thousand or twelve hundred feet - for instance you go from the end of Iowa Hill down to the American River, what distance would they make that thousand or twelve hundred feet?

A. From Iowa Hill, do you mean?
Q. Yes sir, from the Iowa Hill dumps down to the river, how far is it?

A. Well, I could not tell.

2. It is very steep, is it not?

A. Yes sir, quite steep.

2. And the stuff that is shot out on those dumps, has the water to carry it down?

A. Yes sir.

2. Nothing lodges on those steep

hillsides?

A. These cañons they have some flat places in them.

Q. But I am speaking of the Iron Hill dumps if it is just about as steep as can be?

A. I am not very much ~~opposite~~ the Iron Hill; I have been there several times.

Q. Well what kind of stuff do they mine there at Iron Hill, what kind of material?

A. Well mining gravel.

Q. What is called the blue gravel?

A. Well, I think they are mining both blue gravel and top gravel - they are mining both blue and top gravel too.

Q. Well the top gravel runs down to the blue gravel, don't it?

A. Yes sir.

Q. Do you know why there is a difference in the color?

A. Yes sir.

Q. Why? the difference is?

A. No I know why

A. Yes sir.

A. No, I do not?

Q. Gravel is all alike, is it not?

Ans sir.

2. Well, I mean where they come together, where the top gravel and the other gravel come together it is all alike, is it not?

Ans sir.

2. Is not a pretty fair specimen of a top gravel in those two looks? <Would Nos. Two and Three.>

A. This looks something like the top gravel.

2. That is what is called the blue gravel, is it not? <Referring No. One.>

A. No sir; the top gravel is a part of reddish brown.

2. Do you see anything reddish in that?

A. That don't seem to be its natural color.

2. Well, what do you say about that? <Referring to Robinson's No. Two.>

A. It appears to be discolored somewhat; when exposed to the air it don't look the same as it did in a glaze.

2. I will ask you whether looks One and Two and Robinson's No.

Two are not fair specimens of the gravel to be found in what you call the old water channels on that divide?

A. Well, the top dirt is of a reddish color.

Q. Well, but you said that is light, the top gravel?

A. Well, it does resemble it some-yes sir.

Q. Would that wash easily with water?

A. Some of it washes pretty easy on top.

Q. When it is all broken up with very heavy charges of powder, it will wash easy will not it?

A. No sir.

Q. Well it all gets washed before it gets down in the North and Middle Forks, don't it?

A. Some places where the blue cement gets down, I have found blue cement down to the river.

Q. What? A. I have found hard cement clear down to the river not broken up.

Q. Did you ever find any in the river?

A. Yes sir, where

it empties into the river.

Q. Is there any in the river now?

A. I do not know.

Q. Well, as a general thing don't it get all broken ~~or~~ up in going down that thousand feet?

A. A portion of it gets broken up yes sir.

Q. Is not the heavy matter there a fair sample of the heavy matter, that blue cement?

(Referring to No. One.)

A. Well, we have what is called blue cement gravel.

Q. Is that like it?

A. It is something similar to that, but it is more blue; I suppose this is discolored somewhat now from being exposed to the air.

Q. Is that like matter that you have on the bedrock?

A. Yes, in a good many places.

Q. What becomes of that matter, say in passing through the flume and dropping down a thousand feet into either the middle York or the North

Q. Now, does that break up?
A. Partly.

Q. Well, do they ^{get} all the gold out of it?

A. No sir, I do not think they do.

Q. Well, do you find anything but washed stones at the dumps in the rivers?

A. Yes sir; I have found some cement down in the river.

Q. How large? A. Oh, I have seen several chunks.

Q. How large were the chunks?

A. Well, I could not state.

Q. About what size?

A. Oh, I don't know — all the way from probably six inches in diameter, some of it.

Q. Would not powder break that blue cement all to pieces?

A. No sir.

Q. Would not a drop of 100 feet break that all to pieces, after going through a tail flume a thousand feet long?

A. It would break it pretty well up.

Q. And are not those tail flumes

constructed so as to break that matter all to pieces?

A. That is what we calculate to try and break it up.

Q. That is the way you do it, is it not?

A. Well, if it don't break up we can not help it.

Q. You would not be willing to swear that you could go to the Iowa Hill dump and find any considerable quantity of it?

A. I do not know much about the Iowa Hill dump.

Q. How many million yards have been taken out of the Iowa Hill claims?

A. I could not state.

Q. It has been testified here about six million cubic yards. Would that seem a low estimate?

A. Well, I could not put it in yards. I have seen the mines there.

Q. Well, is it like that stuff in those boxes (referring)

A. It is somewhat similar to this red; it is a sort of red brown color. (No. Two.)

Q. They do not use any water on the top of the claim, do they — any powder on the top?

A. At Iowa Hill?

Q. Yes sir.

A. I do not know.

Q. You do not know. How far is Forest City from Iowa Hill?

A. It is about ten miles.

Q. Where did the mines there tail into the Middle York, at Forest Hill?

A. Most of them into the Middle York and into Shittail.

Q. Into Shittail? A. Yes sir.

Q. Into what river does Shittail run?

A. The North York.

Q. Whereabouts? A. I could tell exactly.

Q. How far below Rices Bridge?

A. I do not know; I should judge it must be five or six miles.

Q. Below Rices Bridge?

A. I should judge it was so.

Q, What amount of material has been sent down ~~from~~ the Forest Hill mines into the North York?

A, I could not tell you that.

Q, How many million yards?

A, I do not know.

Q, Do you know whether there is any deposit at the mouth of Shittail in the North York?

A No sir.

Q You say there is not?

A I do not know.

Q, What is the fall of Shittail from Forest Hill down to the North York?

A, I do not know that.

Q, It is 15 hundred feet is it not?

A, The fall of the Shittail down from Forest Hill?

Yes sir?

A, I could not tell.

Q, You do not know?

A, No sir. It has quite a big fall.

Q, Did you say the height of that ridge was about fifteen

hundred feet?

A. Yes sir.

Q. Well, that is on the top of the ridge, is it not?

A. Yes.

Q. Well, it would be at least 15 hundred feet, would it not?

A. From the top of the ridge?

Q. From where the mines are at Forest Hill?

A. No sir Shittail Canon is not so deep as the North York.

Q. That is not what I asked you - it empties into the North York, don't it?

A. Yes.

Q. What is the height of Shittail Canon at Forest Hill above where it empties into the North York?

A. Well, I should think, where we crossed Shittail Canon opposite Forest Hill and Town Hill, probably it would be about 900 to 1000 feet.

Q. Nine hundred to a thousand feet. It is not more than two miles long, is it?

A, Shittail?

Q, Yes sir.

A, Oh, yes sir, it is over ten miles long, I should think. I should judge it was almost 15.

Q, How much water is used in that cañon?

A, How much water flows in the cañon?

Q, Yes sir?

A, I do not know.

Q, You do not pretend to say it is ten miles by Shittail cañon from Forest City to the North Fork?

A, No. I understood you to ask me what the length of Shittail was.

Q, I did not ask you anything of the kind, but how far is it now from Forest Hill to the North Fork by way of Shittail Cañon?

A, I do not know.

Q, Is it two miles?

A, I could not state.

Q, How long have you lived there?

A, I lived there

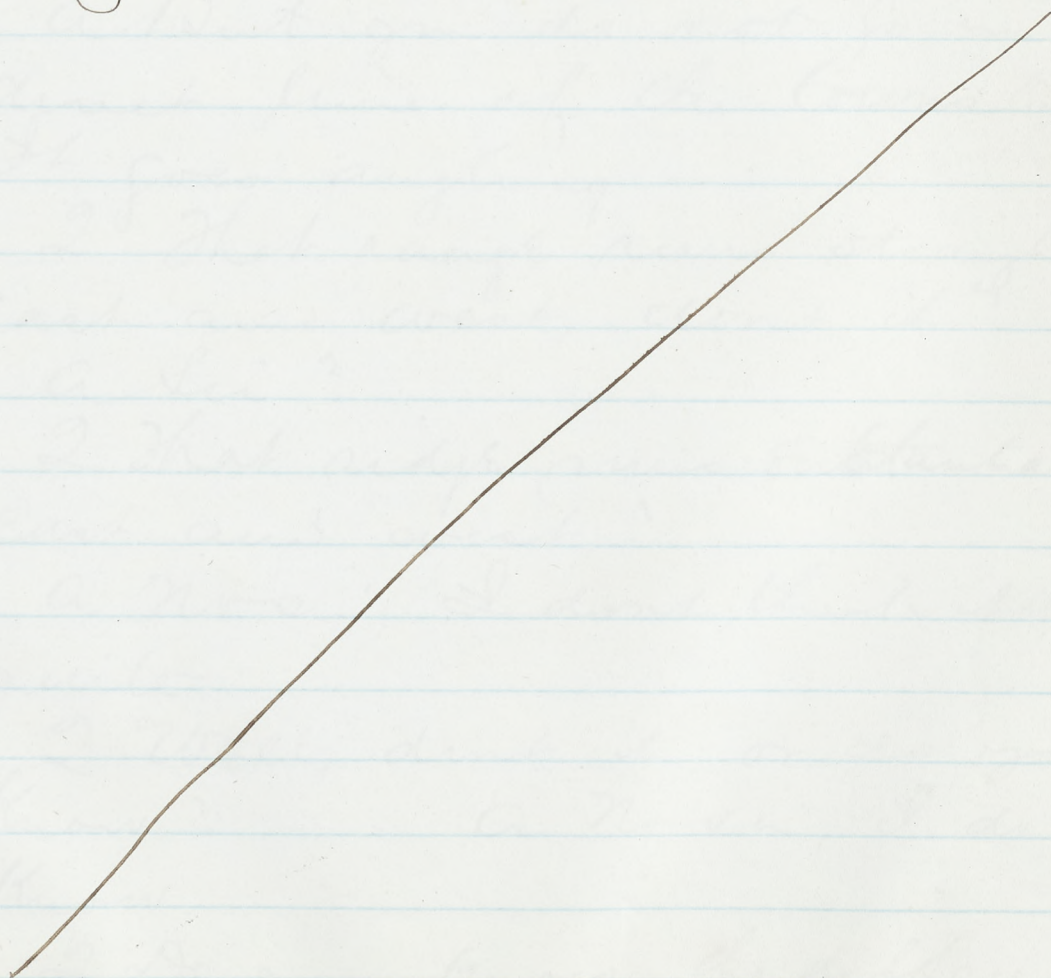
since 1855.

Q. Now you told Mr. Hibble that it was one hundred miles to the summit from Forest Hill divide?

A. That would be my estimate of it.

Q. Now just look at that map and see whether it would be over 40. (The Wilde map.)

A. Well, that was about my estimate of it.



Q. About what?

A That would be about 100 miles in length the total distance.

Q From where?

A From the junction up to the summit

Q It is not more than 40, is it? A I do not know

Q That would be the first 6 would it not (Pointing)? There is the junction: A Yes

Q 1. 2. 3. 4. 5. 6. 7 - in would be 42 miles wouldn't it?

A But you do not go in the direct line of the township. It goes angling

Q That range runs straight East and west, don't it?

A Yes?

Q That ridge runs substantially East and west?

A No sir, I don't think it does quite

Q Well, don't it, or do you know?

A No sir, I do not know.

Q Do you know the difference

between 40 miles and 100?

A Yes.

Q. What is the difference?

A There is 60 miles difference

Q. There would be 60 miles difference. Are you sure of that now? A. I think so.

Q. Now you said something about dust being washed off. What is the effect of a dusty road in Placer County of a rain in October?

A. When it is raining there will not be much dust.

Q. How? A. When it is raining it is mud.

Q. It lays the dust, don't it?

A. Well, the first rain generally wash the dust off.

Q. It lays the dust, don't it?

A. It washes it off.

Q. Well, it lays it.

A. I do not know what you mean by laying it.

Q. Does rain lay the dust ever?

A. It comes in a flat country, but in such a country as that it washes it off.

into the river

Q In October?

A Whenever the rain comes

Q How long does it take the rain to lay the dust?

A I do not know

Q When it is laid it is as hard as the adjoining soil, is it not?

A When,

Q It is not? A No sir

Q Is there any part of the world where there is a little dust as on that ridge?

A I do not think there is another place that has so much

Q Is there any part of California where there is so little travel?

A I am not posted all over California, but I know there is any amount of dust there in the summer time

Q You think there are 1200 miles of roads up there do you?

A I do,

Q How many hundred miles of trails?

A Well, I don't

including the trails and

roads and everything.

Q Are there any wagon roads at all over the Middle Fork?
A Yes.

Q Where?
A At what they call Murderer Bar

Q That is right at the mouth, is it not?
A No.

Q How far from the mouth?

A Probably about 6 or 8 miles.

Q Well, call it 6 miles. Is that the only place where there is a wagon road across the Middle Fork?
A That is the only place that I know of.

Q How long is the river?

A I should judge it is about 100 miles.

Q Well, is there any wagon road across the North Fork above Coalfax?

A I do not know.

Q Well, you must know about that.

Mr Dubble He says he does not know.

Mr. Cadwalader He does know
in another sense. That country
nearly stands on its end, does
it not? a It stands pretty
well elevated

2 It is far rougher than the
country beyond the South
Fork or beyond the Middle
Fork is it not?

a I do not understand the
question

2 Is the country south of the
Middle Fork and north of the
North Fork as rough as that
Middle Fork country?

a I am not very well posted
on the other side

2 Is there any wagon road
in that country off of which
is called the Back-bone?

a Yes,

2 where? a In the
Country, you say?

2 Well where?

a Well, it commences as soon
as you get up to the North
Fork. There are wagon roads
in all directions.

Q When you get up how far?
 A On top of the North Fork
 Hill

Q It is only 5 miles from
 river to river, is it not?

A Down toward the junction
 it is narrow

Q It is 5 miles up at Yan-
 kee Jims? A I put it
 at 10 miles in

Q How wide is it at Todd's
 Valley? A Todd's Valley
 is about on the same line.
 Todd's Valley and Yankee Jims
 and Forest Hill are all on
 the same line

Q Upon what inclination
 does $\frac{1}{4}$ of the Middle Fork
 Country stand?

A What inclination?

Q Yes

A Well down on the Middle
 Fork it is very steep

Q It would be a good deal
 over 45 would it not?

A Well, I could not say

Q Do you know what 45 is?

A What the inclination of

45 depress it? a Yes.

I well, take the banks of the Middle Fork, comes not they average 65'?

A No sir, I do not think they would.

I well, from Shavano Bar up in the mountains

A No sir, I do not think they would.

I well, take Eldorado Canon then comes not that average 80? A No sir, I do not think it would, some places it would average more than others

I well, take the whole North Fork slope from the stage road up? What does it average? A well, I should think along the river banks, it would average from 40 to 45

I. How came you to say that there had been \$50,000,000 taken out of that divide? A That is what I think there has been taken out

Q Did you do that because the preceding artmen said there had been that much taken out of Eldorado County

A No sir, I do not know anything about Eldorado County

Q How comes it that 3/4 of the population have left there since 1870 and yet there are 100000000 in the hills. Do the people there run away from gold deposits of that kind?

A They had a regular stampede there about the time of the Fraser River Excitement

Q Why did Wells & Fay & Co. withdraw from that country and decline to carry treasure if there was so much treasure there?

A I do not know

Q Well, don't you know?

A I have heard that it was on account of the stage robberies

Q Well, that country is nearly depopulated is it not?

A Noan.

I would you find 10 men
on that divide below Todd's
Valley? A Yes

I would you find 10 men
East of Damascus at this
Season of the year? A Yes.

I would you find 8 men
at work on the Middle Fork
of the river, above Spanish
Run at this season of the
year? A Well, I am
not well posted on the
river

I would you find 10 men
at work on the North Fork
above Rees bridge at
this season of the year?

A I do not know

I would you find three
men at work on the North
Fork below Rees bridge
and down to the Middle
Fork at this season of the
year? A I am not
posted on the river at all

10035 I what is the population

Of the place you live in
Forest Hill?

A I do not know that
Leohut is the quantity
of water used in mining
here with the exception of
the Dardanelles Claim?

A I do not know

Is very small is it not?

A There is considerable
used there

Is there is no natural wa-
ter on that divide at all,
is there? A There is
water in canyons

Is I mean up on the
divide, on the top of the
divide on the back bone?

A Only what is brought
in by mining ditches

Is by ditches? A Yes

Is are there more than two
ditches there? A Yes

Is what are they?

A Quite a number of
ditches there

Is are there more than 2
principal ditches? A Yes

Q What time do they get out of water in that divide?
 A Well, it depends upon the season

Q Well, the average?
 A Well, the water season generally commences about the first rain in November, December or January. The water some time holds up as late as June.

Q But generally you get out of water there in May don't you?
 A Sometimes

Q Well, the average year?
 A No, I should think about June.

Q About the 1st of June?

A No the last of June, some times it runs into July

Q What time do the ditches then freeze up?

A Some of them do not freeze up at all

Q I mean the principal ditches what time do they freeze up?
 A Well, I do not know that they freeze

up at all

Q They do not freeze up?
A No sir

Q They run all winter do they? A When there is water to run in them

Q They have no trouble, as a general thing they run all winter. Nothing interferes with them? A Well, they break some times

Q But usually they have no trouble? A I do not understand what you mean by trouble. A ditch breaking?

Q You said a few moments ago that they run water all winter when there was water to run? A Yes, except when the ditch comes break.

Q Ditches do not break very often do they?

A Yes very often

Q They do? A Yes.

Q Do you know the total number of miles of ditches in Placer County?

A I think I estimate them

about 200 miles.

Q In the whole County?

A In Placer County?

Q Yes? A No, I do not

Q I will ask you whether you know the number of miles of ditches in Placer County.

A I thought you were referring to the Forest Hill divide

Q No. Don't you know that there are 3 times as many miles of ditches, in the other parts of the County than there are in that divide?

A I do not know.

Q And the total amount of mile in the ditches are 358?

A I do not know that.

Q Is it not a fact that you have not steady water supply on that divide?

A No steady water supply?

Q Yes?

A Only in the winter season.

I only in the winter Season?
a Yes.

I The Middle Fork runs
through slate rock does it
not?

a Yes.

I The Middle Fork runs
through slate rock does it
not?

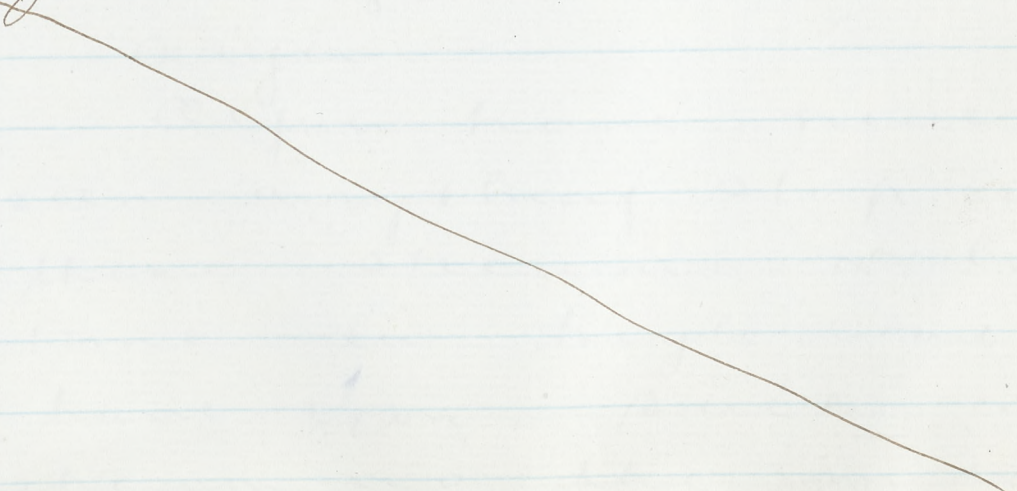
a I do not know.

I have never been down
there?

a Yes I have been down

I What do such cañons
as Eldorado Cañon
run through? Hard
rock?

a. I could not tell
you.



Q Have you ever been down in it? Alfes.

Q Has not it got a rocky bed? A I think it has in some places

Q Now do you know anything about the transporting power of water? Did you ever study that question at all?

Ans Sir

Q Mr Dibble got you to say that certain classes of material got only 2 miles from the dumps and a certain other one got 4 miles. That would depend on the grade and the amount of water how far it would go would it not?

Alfes

Q You have never seen anything stop in these streams a long time in high water, have you, such a stream as the middle

fork? A I am not
well posted on the Middle
fork

Q You have never seen
anything cling to those
hillsides in the Winters
have you?

A I have seen the cement
that we washed down
stop in the cañons.

Q What? A A large
amount of cement settles
in the Cañons before it
gets to the middle fork
The greatest trouble is to
get it down to the Middle
fork

Q If you once get it down
to the middle fork it
will go down?

A That is what we try

Q If it once went into
the middle fork it
would go down, there
is enough water there

A I do not know
where it would go to
suppose it would

Spread out there

Q Do you know how many hydraulic mines were in operation on that divide in 1881?

Ans sir I do not

Q you do not know?

Ans sir

Q you gave the names of Pond Hole and the Dardanelles?

Ans

Q They are the two largest mines on the divide, that is they have all the water. That is so is it not?

Ans The Pond and the Dardanelles?

Ans Yes the Pond and the Dardanelles?

Ans They sell some water, I think

Q They have got the largest water supply?

Ans Except the Down Hill Company

Q Well how much water

has the Down Still Company
got? A I do not know

What are the claims
A King? I think about
5000 inches I have heard
them pay 5000 inches

Q The Down Still Company
has 5000 inches? A That is
what I have heard

How much material
would they wash with
that 5000 inches?

A I could not tell you

How long have they
had those 5000 inches?
How long has it been since
they got this water in
there? A I should
think it is about 8 or 10
years

Q They have been washing
with that 5000 inches
ever since have they?

A I do not know

Will you think so?

A I do not know. I
presume they have. I
do not know

Q Do you know what 5000
inches of water is?

A Yes

Q You have seen it there
at the Iowa Steel Co.
have you not?

A No sir

Q How do you know that
it is 5000 inches?

A I have heard so.

Q Have you ever been
there? A I have been
there many times

Q Who told you so?

A I think it was Mr
Van Vactor

Q Have you never been
at Iowa Steel? A Yes

Q Haven't you ever seen
that canal? A Yes

Q Have you ever seen
that claim in operation?

A I have crossed the
canal several times.

Q Would you know 5000
inches of water if you
saw it running in a canal?

A Well I could form

some idea of it?

Q Well could you see it there? A Yes

Q It was running in the ditch? A I

do not think I ever saw 5000 inches in it

Q How much have you seen? A Between 3000 and 4000

Q At what place? A At what we call the Forks Stream

Q Have you any idea of how much material these boxes 1 and 2 these three or 4 thousand inches would wash - I mean boxes 2 and 3?

A Well if it was all plucked up like that it would wash a good deal of it

Q Well how much?

A I do not know

Q Well about?

A Well I could not make much of an estimate

Q 20 cubic yards a day
twenty cubic yards in
24 hours?

Answer I would not like
to state I have never
figured on that

Answer about, well times,
what do you estimate it
at? A I could not
make any estimate of
it of the amount of
cubic yards

Q What do you call that
stuff in those two boxes?

Answer I call that
gravel, red gravel

Q Is not that what
you call air slacked
cement? A I call
that gravel

Q Do you not also call
that air slacked cement?

Answer is that is what
I call cement there
is a different thing
altogether.

Q I ask you whether you
do not call that air

slacked cement?

A Air slacked gravel
Q That comes out of
these old river channels?

A It comes off of those
mountains

Q That is the name
for that, air slacked
gravel is it not?

A I should judge so

Q It does slack by ex-
posure to the air?

A Yes

Q Well where did you
mine in a hydraulic
way? A Where?

A Yes A I mined
in the Dardanelles for
several years

Q Have you got any
air slacked cement there?

A No sir

Q How much would
a cubic inch of water
wash out of the Dardanelles?

A I do not know

Q What do you mean
by saying that there are

150 mining claims in that divide? Or I think there is more

Q There is no lava overlapping any of the deposits of gravel on that divide are there?

A None is that?

Q There is no lava — well I will not ask you that question. How many persons were engaged in mining there in early days on that divide as compared with the present time say when you first went there in 1853? A Well there were a good many more when I first went there than there is now?

A Well 10 times as many?

A No I should not think there were that much

A Well about

A I do not think the population on that divide is over one third now of

what it was when I first
went there

Oyes say it has been
reduced $\frac{2}{3}$ since 1870?

A I suppose there are
about 500 people on that
divide now East of
Damascus? A 500?

Oyes A I think there
are more than that

How many 550?

A I should think there
were between 3000 and
4000 people on that
divide

— " —

Testimony
of
A. A. Freeman
Called for dep. Sworn

Mr Beche. Q What is your residence and your business?

A My residence is in Oakland, my business draughtsman

Q For whom? A For the Central Pacific Railroad Company

Q Have you examined the little cross sectional plate that is brought in by Mr Wilkinson? A Yes

Q Showing the railroad between this City and the highland opposite at Davisville?

A I have

Q Have you compared that with the notes on file in the office of the Company? A Yes

Q How did you find it? A I found it

correct except in one particular instance

Q State the instance in which it is not correct and where the correction should be made

A That is in relation to the area of the openings

Q Show you the plat in your hand or by you? A Yes

Q Just call the attention of the Court to the particular place where that correction should be made

A It is in the total area of the openings

Q Show the fault there is in the computation? A Yes

Q And not in the measurements? A No Sir

Q State then what the correction is that should be made The area is given here upon the plat as how much?

A It is 118,641 square feet

Q What should it be if corrected?

A 120,008 feet

Q That came from an error in the computation?

A In the computation is

Cross Examination of A. A. Freeman

Witness Q Do you know that that plat is correct by actual measurement and survey in the field? A Yes

Q You have made the surveys yourself?

A No sir I have not made the surveys

Q Do you know that any survey is correct upon which that plat is based? A Yes

Q How do you know?

A Well from the notes that I got from the engineer

Q Do you know that those notes are correct? Ayes

Q How do you know?

A By plotting it.

Q How can you know that the field notes are correct and the survey without making the survey yourself?

A I cannot always know it. They are not always correct.

Q How do you know they are correct if you did not make the survey?

A They are generally supposed to make correct surveys.

Q The notes are correct if the survey is correct?

Ayes

Q But you do not know whether the survey is correct or not?

A No sir not without I check it myself.

Q Not without you make a survey? Ayes

Q You would have

to make an actual
survey in the field
in order to compute
the number of cubic
feet correctly and
know that you were
right would you not?
Ans. Sir

Q You would not have
to make a survey
yourself? Ans. Sir
I should think not.
I would not have to
make a survey myself

Q How would you ascertain the
number of cubic feet in a surface
between here and Parisville without
surveying and ascertaining the distances
and depths? A By taking the notes that are
sent in as correct.

Q You would accept them as correct
A Yes. Q You would swear to
them as correct? A Yes to the best of
my knowledge

Q But you would not have
any knowledge on that subject.
A Yes.

2. How can you have knowledge on that subject unless you make the survey yourself. Don't you know that it is impossible for you to know whether the survey is correct unless you made it. You may assume that somebody makes correct surveys, but I mean as a matter of knowledge. Is it not impossible for you to know unless you made the survey? A I do not exactly understand what you mean

How can you know whether a survey is correct when it is made by somebody in your absence?

A Well, his former surveys are generally correct and I judged this to be correct

2. His former surveys were always correct and you assume this to be correct without knowing whether it is or not

A Yes sir

2 Is that a fact?

A Yes sir

Mr. Belcher You checked the survey through? A Yes sir
 & and platled it?

A No sir, I didn't plat it
 Mr. Cadevalader We will produce the man who made that survey

Mr Belcher We offer the plat. I was under the impression that that had been offered and received subject to certain approval. If not then we desire to offer it now.
 The Court. It was objected to because Mr Wilkison did not swear to the correctness of the survey

Mr Belcher Mr Wilkison is not here, because he was sent away upon business of the Company to Oregon and hence we brought this young man from the office of the Company

who is a draftsman there
and who has checked this
survey from the field notes
The Court. I do not know
whether they object to it
Mr. Cadwalader Yes, we ob-
ject to it, as not authen-
ticated

Mr. Belcher We think that
is a sufficient authentication.
The Surveyor or Engineer having
himself stated that he had
made the survey and the
measurements, that the
field notes were in the
office of the Company
and that upon request he
said that he would go to
the office and he would
prepare a plat showing
the exact measurements
of the openings and then
did prepare it

The Court. I do not remem-
ber that he swore it. You
can look at the testi-
mony, and if you find
that he swore to the

Correctness of the Survey
and it can be identified
as the one he spoke of
you are entitled to it.

Mr. Cadwalader On the Con-
trary Mr. Wilkinson said
that he did not know any-
thing about the measurements
there.

The Court. It is not necessary
to talk about that now.
You can find his testimony
I presume

Mr. Belcher This is Mr. Wil-
kinson Survey?

Answer Sir

Q Is this plat made from
Wilkinson's Survey, from
the field notes of the Survey?

A Mr. Wilkinson had charge
of the survey, yes Sir

Q He had charge of the
survey and returned it
to your office?

A The notes, yes Sir

Q The field notes of the
survey? Answer Sir

Q And this plat was

made from those field notes? After this

I am in exact accordance with that?

After this, except that area of the openings

I now in regard to Mr. Wilkinson. Do you know where he is and upon what business he has gone?

A Obe left for Washington Territory to make some surveys for the Coal mine.

I And when will he probably return? A I have no idea.

Mr Hart. You say that Mr. Wilkinson had charge of the survey? After this.

I What do you mean by having charge of the survey. In what respect did he have charge of it?

A Well, he was Engineer in charge and perhaps farther under him.

I The fact is he is the Chief Engineer of this.

Section, isn't he, or is he?

A Yes sir, he has charge of the California Pacific — he has assistants

2. He is at the head of the Engineer force in and about Sacramento Valley?

A Yes sir

2 Now there are many Surveyors are there not under him in different places?

A Under Mr. McKinnon?

2 Yes sir? A Not that I know of.

2 Do you know that he did any portion of the work in making this Survey?

A I suppose he did, yes sir

2 Well, I ask you if you know, not what you suppose?

A I do not see him. I did not see him and do not know — Do you know that he was present at the time the Survey was made?

A No sir, I do not.

2 Do you know that his field notes correspond

with the survey that he made in the field?

A. I should judge they do. I ask you if you know. I ask you if you know that his field notes correspond with the survey in the field?

A. Not positively, no. Mr. Belcher I would like to ask the Attorney General if they propose to raise all the technical objections that can be raised to the Survey. They know that it is correct, they know it was by Mr. Corkin, and they know what he states here on the stand.

Mr. Hart. I do not know that it is correct.

Mr. Cadwalader. If you appeal to me I will say that Mr. Corkin told me that he did not make it. Mr. Belcher well, I did not appeal to you, I should not appeal to you for any thing that I now think of.

We can be put to some little
 expense and trouble but I
 think we can make it. We
 will try and look at the
 evidence and see how far
 Mr Wilkinsons Evidence Cor-
 ers the case
 Mr Hart. If he made the
 Survey I have no objection

"

Testimony of W. F. Kroy

Called for deft.

From

Mr. Cutlin How early did you become a resident of Sacramento? A I came here first in the spring of 1850 to reside.

I state whether you have resided here ever since?

A With the exception of a few months in the mine and 1 or 2 trips to the East

2. Where the natural drainage of the surface here discharged in early days say in 1850. 1, 2, 3 and a day there, what sloughs or other sources of drainage were there from the surface of the City and state where it went to?

A There was low ground south of the City between

here and Sutterville. There were sloughs that ran through the City in very early days.

Q Describe these sloughs that ran through the City in early days?

A There was one between Front and 2nd and across J and K. and the other started and ran down into the low ground. There was another that crossed J. at about 8th that ran down diagonally across under where the Catholic Church stands now, and turned on down into the low ground.

Q Into what low ground do you speak of now?

A In the low ground south of the City, commencing at M or N street, and so on down as low as —

Q [Intg] The low land within the City limits?

A There was some of it within but the lowest ground was below the City and probably

The lowest point was $\frac{1}{2}$ a mile below the City

Q How far did that low ground extend up into the City, how far did the tules extend, indicating the lowest grade.

Mr. Cadevalader I object to that as leading. There is no occasion to lead this witness

Mr. Catlin Ask how far that low ground extended

A I say that the low ground extended up to where M or N Street is located and there were tules growing I think where O and P Street is and from there on down

Q Go on, and describe as far up as O. you say and between what Streets?

A I think the lowest point was about where 5th Street is. The ground slopes back from the back from the river probably to 5th Street, and there begins

to rise

2 To the East?

A To the East, yes sir

2 Describe the character of that slough that you say came down here diagonally through the City and passed down here where the Catholic Church now stands, what you know in regard to its capacity for discharging water?

A Well, it crossed near where this building stands, it crossed under where these buildings on the opposite side of the street stand now

2 On the opposite side of 7th Street? After we and ran in a south easterly direction. There was quite a slough, I should judge that was 20 feet wide on top and probably 6 or 8 or 10 feet deep. This slough that I speak of here and intersected another one near 8th and J. Street that came down about where 9th Street is now

and then it ran diagonally
across near 6th and L.

Mr Cadwalader We object to
this because this criticism has
been once examined in the same
Subject.

Mr Catlin I have had not
been examined before on this
Subject. I want you to de-
scribe what you know in
regard to what uses were
made of that slough as far
as you know personally in
your business here in the
City in the early days.

A I was a carpenter and
builder.

Q I say, did you have occa-
sion to use that slough for
any purpose at any time?

A No, not except to cross
over it as other people did.

Q Now, any slough in the
City during high water or
during the winter say of
1853, January 1853?

10088 A Oh, during the flood of
waters around

2 Well, did you transport anything in your boat?

A I transported some bricks after the fire of 1852. I was building a church at the corner where 7th and L Street is now, and the work burned down and the congregation were not able to pay for it and they threw it on to my hands and I sold the brick to Hopkin and I boated them from 7th and L down the slough that I speak of and through the low ground and up to the corner of 3rd and K streets in a small scow boat. That was the flood after the fire.

2 What other sloughs of importance were there in the City? A Well, there was Burns Slough, a large slough that came down from the East and ran through the town.

2 Describe the action of the water in Burns Slough,

where it went to and where it discharged?

A Well, it ran diagonally across the City and came in 31st and F and G Street and ran across just this side of the fort and ran down through where the brick yards are and so on down east of the Cemetery the largest portion of it

I well, after it passed east of the Cemetery state whether it ever got back into the City in any way?

A It did on some occasions run back in again through the ditch below the Cemetery in the low ground that I spoke of before

I Passed around the Cemetery? After it, Passed around and came through. I have seen it running in there

I How far up into the City?

10070 A Well, it ran into this lake that I spoke about,

the low ground here
 1. 2 wells, how far would
 the water come up above
 Y. Street? A In the
 high water of course it was
 all over the lower part of
 the City during these floods,
 but in ordinary season I
 do not remember how far
 it would come.

2. Was there any escape
 for the water of Burns
 Slough, or not below that
 point naturally, before there
 was any artificial drainage?

A Well, it ran into this
 low ground between here
 and Sutterville and afterwards
 ran over into the Sutter
 ville Lake and before the
 levees were built in 1865
 it would run into the river

2. Through sloughs or into
 the natural surface?

A It spread out over the
 natural surface, I do not
 remember the slough, I was
 not so well acquainted

When I was in the City.

I State what means you know the City took at any time during the fifties, say from 1852 to 1860 by way of getting rid of the water in the City above R Street.

A Wall, there were 2 or 3 attempts made to pump it out. I was not connected with the City Government in any way and I do not know any of the particulars about it, but I know there was a man by the name of Nolan pumped at it once, and Ausboro and Hubbard pumped at it once at different seasons, I do not remember what years.

I Let me ask you about how much ground Estimating it by blocks, taking J. Street as the southern part of the City limits, how many blocks of ground did this water in those seasons when it accumulated there,

Cover:

Mr Cadwalader I object to that as vague and indefinite suggestive and leading

Mr Cathin Give us some idea about it

The Court. I do not see where in it is objectionable, go on

Abell, from 3rd to 6th Street I would consider that as low ground, that would be 3 blocks.

Mr Cathin In cordth?

After see, and then from O Street to Y. Street with the exception of some high ground that there is between R and Y. There may be a ridge or two that would be in this boundary probably - It would be about 30 blocks, probably less 3 or 4 that were higher, between R and Y.

I were in connection with the City Government, and if so state at what time and in what capacity?

A. I was Street Commissioner
6 years from 1874 to 1880

Q State when the City
first undertook to establish
drainage for this water that
accumulates in the City about
what time and under what
authority?

A. After the levee broke
in February 1878, the Legis-
lature was then in session,
and they conferred the power
that formerly had been in
the Levee Commissioners they
conferred that power upon
the Trustees, of whom I was
one of three.

Q. Which break of the
levee do you now refer to?

A. The Lovedal break in
February 1878, within a
month or two after that
time the Legislature being
in session, they transferred
the management of the
levees and drainage to the
Trustees.

Q State whether that was

the first that the City undertook to drain by establishing a canal below?

A Yes sir, that was the first the City undertook to do that-

I state whether you had anything to do with the construction of that drainage Canal? After, I had the superintendence of that work when I was in office, it was begun here and the City adopted that as a part of the drainage from here to Goodgrass Slough and began at the upper end, and let contracts and completed the Canal to Beaver Lake just below the high land at Freeport. That was done under my general superintendence.

I will, state how that Canal was constructed with reference to the selection of its line, whether you straightened the natural

Course of the outflow or not? A We established a grade line, from the discharge of the sewer at R Street, ~~to~~ and R Street, to tide water in the Snodgrass Slough and the City Engineer laid out the route from one lake to the other, for instance from this low ground that I have been talking about below the City to Sutter Lake or Soudon Lake as it is sometimes called, and then from there to Peaches Lake, there was high land between those lakes.

2 There was high land between Soudon Lake and Peaches Lake? A Yes sir,

a ridge ran in at Freeport

2 State whether the Canal was constructed through that high ground? A It was

a Canal I think 50 feet wide on the bottom down to this grade line that

had been established. The excavation there was probably 15 or 20 feet deep in some places.

2 Well, state whether that was a point of land making a natural obstruction prior to that time? After all, it was high land that came into the river at Freeport.

2 Before that high land was dug through in this way, was there any natural escape for the water below that point? A There was no escape through the high land, for the waters.

2 I say, would they get further down the system of lakes or did they stop further above there?

A No they stopped at the place we called the Pocket, which is below the Sutterville Lake formed by a bend of the river, that was all tule ground, the

most of it, Except a little ridge around the river bank a considerable of an area I do not know how many acres, and this water discharged into that.

2 Prior to the construction of the drainage canal through that ridge of high ground at Freeport that you have just mentioned where did the water go that flowed down through this basin from the City, also what section of the County where would it be discharged or the disposition of it?

Answer, I only know from hearsay.

2 You know the Country there, you were on this Canal, you Superintended its Excavation and know the situation there? Answer, I know that it could not run over this ridge, and it must necessarily have remained in the Pocket

until it ran over the levee,
 until the levee was cut
 away to let it into the
 river, or until it Evapora-
 ted. 2. Or dried out? A Yessir
 2. State how much gain way
 made in the grade if you
 know by excavating through
 this ridge that you speak of?

A my recollection is, about
 7 feet fall in the whole
 length of the canal from
 R Street to the tide water
 in Snodgrass Slough and I
 think that we cut down into
 the ridge from 15 to 20 feet, I do
 not know exactly the depth

2 Well, that fall of
 about 7 feet between
 R Street and Snodgrass
 Slough was obtained by
 cutting through that ridge,
 was it not?

A Yessir, cut through that
 ridge and the other ridge
 this side of Grunden Lake,
 between the City and Grun-
 don Lake

Q Now was that canal completed as it was projected under the Act of the Legislature mentioned? And sir I believe not; it was not completed while I was in office. I do not think there has been anything done since ~~in fact~~ I know there has not.

Q Why did you stop at Beech's Lake?

A It was all we could do at that season, it was in the Fall of the year.

Q What year was it?

Just mentioning the year.

A I think it was 1878. I think it was the fall after this flood that the Contract was let extending to Beech's Lake. That was the contract it extended to that point.

Q That is as far as the work could be done or

was done that season?

What was as far as we had means and had time to do it that year. It was the intention of course to continue it the next year.

Q It has not been resumed since? A I think not so sir.

Q I will ask you this question Mr. Knott; whether the drainage of the City since the Fall of 1878 is or not better than it was prior to that time.

Yes sir.

Q I will ask you from your acquaintance with that drainage canal if drainage would be improved if the canal were continued to Snodgrass Slough? A I think so. Yes sir. There is other high land below Beech's Lake between Beech's Lake and Snodgrass

slough through which
the canal was intended
to be excavated

Owll, when you speak
of high land describe
about how high?

a I do not know I have
never seen a profile of
the survey

O fine no some idea.
You do not mean a
high mountain or a
high hill do you?

Mr. Caldwell That is
all irrelevant, where you
have to deal with inches

Mr. Ballin O would they
have to cut any deeper
than they have cut?

a No sir I think the
Freeport excavation is
the deepest that was
on the whole line of
the Canal. My idea
is that it would be
probably in places 7
or 8 feet to be excavated
between Beech's Lake

and the outlet of the Canal
at Snodgrass Slough

What has been the
effect upon the drainage
Canal by the work having
been stopped at Beech's
Lake?

Mr. Adalade objects
to that as calling for a
conjecture

Mr. Atlin O what effect
from your observation and
acquaintance with it?

Awell I have not been
down there - I have not
been at Beech's Lake at
any time when the water
was high running down
in the Canal since it
was completed

Awell from what would
obviously appear to you
from your knowledge
of the topography of
that Country?

Aw of course it would
raise the water in
Beech's Lake higher

than it would be if the canal was completed, I should think that would follow as a matter of course.

When was the present system of sewers in the City inaugurated - about what time?

Q At the time the high grade was established. I do not remember what year that was, it was was along after the big flood of 1862 when they commenced running the sheets in the high grade the balance of the sewage was adopted and, as the high grade progressed, brick sewers were put in the odd numbered sheets running North and South - every other sheet.

Q Do you know of any obstruction that has been caused to this drainage

Canal or any drainage canal that the City has had below here by debris in the river, other than those obstructions which occurred at the time of the Lowdell break in 1878 and the Fern and Mesick breaks in 1881?

Ans I do not know of any obstruction to the Canal. There is more or less sand and debris carried out of the sewers from the livery stables and washing off the streets.

Q That comes from the streets - I am speaking of the debris from the river? Ans No - not except when the levee broke that is all. The river was kept away from the Canal?

Q State what means have been adopted by the City for the purpose

of relieving the City from the waters of Burns slough or within the past year?

A It has been carried around the City from 31st Street on the East to Y Street on the South the slough has been carried around outside of the City entirely.

Q Outside of 31st?

A It is a canal in 31st Street and in Y St.

Q And goes from Y to 16th? A Yes sir and there intersects the drainage canal that was constructed.

Q It passes over the Y Street levee does it? so as to carry it outside?

A It comes down on the outside of the Y Street levee on the South side of the Y Street levee to 16th Street and there discharges in the

Canal

Q When was this first done by the City?

A It was done this last Season

Q Prior to that time was there any means taken for relieving the City from the effects of Burns' slough?

A No except to facilitate its passage through the City by digging ditches etc.

Cross Examination of W. F. Knox.

Mr. Caldwell Q Did you want to be understood in reply to Mr. Catlin that the debris in the river did not affect the drainage of this City?

A I understood him to ask in regard to the Canal, if it caused

any obstruction in the canal except when the levee broke south of the City.

Q That is the way you wanted to answer it was it?
A Yes sir

Q That is what you meant you did not mean to say that no sewage water ever got into the canal did you?
A I did not answer the question that way. I did not understand him as inquiring about sewage.

Q There was a good deal of circumlocution about it you were asked if you knew of any causes affecting the drainage of this City.

Mr. Batlin I did not ask that question.

Mr. Badwalader Well there was a good deal of circumlocution about it.

A I did not understand

it to be asked that way
 Q You did not understand
 it to be asked that way?
 The sewage water from the
 river. —

Mr. Catlin (Intg) I object
 to any inquiry upon this
 subject because I did
 not open it.

Mr. Badwalader You do
 not want to be understood
 as saying that the
 debris has not sent
 sewage water into the
 canal?

Mr. Catlin I object to that
 question.

The Court Ask him that.
 A Sewage water did not
 come into my mind at
 the time I answered
 that question.

Mr. Badwalader O Sewage
 water has kept that
 canal full has it not?

Mr. Catlin I object to
 that on the ground
 that I did not open

it at all.

Mr Badwalader I wish to show that the drainage had not been better since 1878 than it was before.

The Court If the witness knows, go on.

Mr Badwalader What effect has the sewage water from the river since 1878 had upon the canal and the sewers?

Mr Catlin I object to that question on the ground that I did not open it.

The Court overruled the objection; defendant excepts.

As well each year the sewage water rises -

Mr Catlin Limit the question to the drainage canal.

The Court I understood drainage to refer to what runs off not so much

what gets into the City
 as what runs off from
 the City. I think the
 witness and Mr. Catlin
 both understood the ques-
 tion to refer to the drain-
 age canal. I will sustain
 the objection to that part
 of the question.

Mr. Badwalader Q What
 has the sewage water
 from the canal in 1878
 had on the drainage
 canal? A The sewage
 water every year is higher
 than it was the last
 and getting higher and
 higher and has for a
 number of years past
 in the ground and of
 course it gets into the
 low land canal and on

Q It fills the canal full
 don't it? A Yes sir but
 it don't obstruct the flow
 of water. It makes more
 of it.

Q But it fills the canal

full. Arises in all the low ground

Mr. Cutler do you say that the seepage fills the Canal? Answer the Canal passes through the low ground of course it is not seepage water, it does not fill the Canal where it runs through those high places

Mr. Caldwell Q For what reason do you think the drainage is better since 1878?

A My answer to that question had reference entirely to cutting through the high ridges and letting the water flow away. Seepage water was not in my mind and that was what I meant when I answered that question

Q Cutting through the ridges 5 miles below here? A The first

ridge is probably a mile below Y Street, about a mile, the other is 5 or 6 miles, the high ridge of course in cutting through those ridges you improve the drainage in my opinion

Q What is the fall of this City from the bank of the American river to Y Street, that is on the original surface of the river?

A The American river as it was when you were here down to Y St?

A Well I really do not know

Q Well there was quite a heavy fall wasn't there?

A Yes Sir

Q Enough for drainage purposes?

A For the water to run off, certainly

Q Well, then there was a fall from the river

bank back ^{of 3rd and} South of C^o.
 street? Ayes sir

Q And then there was
 a fall from the banks
 of Burns plough to 5th
 St South of C^o?

Ayes sir

Q And then there was
 a low piece of ground
 South of C^o and between
 3rd and 6th covering about
 30 blocks? Ayes sir
 and extending down below
 the City

Q And there is where
 all the drainage of the
 City has gone.

Ayes sir

Q This City has spent
 very large sums of money
 since 1874 in perfecting
 their drainage has it not?

A Since 1874

Well since 1874 in
 constructing sewers?

Ayes sir, in sewers
 of course they have
 spent a great amount of

money

Q After the City was raised to the high grade in 1862 the old sewers were abandoned were they not?

A Well, there were no sewers before that except little boxes across the streets that had been filled in; there were no systems of sewers as I remember at all.

Q Since 1862 the City has been sewered all over? The low

A Yes sir that is the high grade portion has had sewers put in

Q Now about the low grade.

A Some portion of the low grade

A Well how about the greater part? Is not all the City sewered?

A No

Q Sewers on 12th St?

A There is a sewer

in 3rd, 5th, 7th, 9th under the high grade and in 13th there is a sewer and then ^{there are} alleys sewers that connect with those sewers running from the even numbered sheets to the odd numbered sheets, in most of them

O That plough that ran through 7th sheet down past the Catholic Church on 6th sheet came in to this low ground on 5th sheet didn't it or 6th sheet? Ans sir, the sewer on 7th sheet ran to the alley between K and L and then in 8th down and down 8th St to R and down R to the low ground. The 9th St sewer ran to the same point

Well originally this piece of land was better drained than any other piece of land in this Valley South of Feather

river was it not?

Answer the City stands.

Q Yes sir on either bank of the river? Answer I cannot say that it was.

Q Well, it had a fall from the American river to Y Street didn't it?

Answer sir, there is a natural fall of about 6 inches to the block across the City from the American river.

Q And it has a plough to drain it on the East?

Answer sir

Q And it had the 30 blocks of low land extending from O to Y Street in the Northwestern part of the City? Answer It ran down into this lake or low ground into the City and below the City, extending a mile below the City.

Q That was the only piece of land on the river that had a sound.

connection with high
land without crossing
tules? Ayes sin it.
Connected with the
high land out beyond
Burns's slough

Q Well the fort was on
high land? Ayes sin
high land from there
on out

Q The fort is on 26 or
27th Street? A 26th
and L.

Q Burns slough carried
the water South and West
of the ridge, what is
called Poverty Ridge didn't
A What is called Poverty
Ridge West of it.

Q Ran down into the
tules? Ayes sin below
where the brick yards are now
and into this low ground
below the City

Q And afforded drainage
for that part of the City?
Ayes sin It ran down
into this low ground.

Q Well it afforded plenty of drainage for that part of the City

A Yes in very good drainage

Q It could not be better.

A It would be better if it had more slope to it

Q Well Burn's slough is quite a water course is it not?

A In the spring of the year when the rivers are up there is a good deal of water running down it.

Q Have you ever been where Snodgrass slough empties into the Mokelumne

A I was there once, yes in, once or twice

Q When was that?

A I think it was in 1860 or 1861

Q You have not been there since? And is not of late years

Q You do not know

whether mining debris
has filled the mouth
of that slough up or
not? A I do not, it
was not filled at that
time. I put a dam in a
slough close to that, it
was not at that time,
I do not know now

O Burns's slough now
carries the water
outside of the City
don't it? Ayes sir

Q And discharges it
into the drainage canal
at 16th and Y?

Ayes sir that is a
branch of the Canal
that we ran up to 16th
and Y.

Q These low lands that
you speak of how many
acres of the City proper do
they embrace, these Bo
blocks? A I think there
are about $2\frac{1}{2}$ acres to
a block.

Q That would be 75 acres.

A Including the Sheets.

Q The City is 2 miles square is it not?

A Yes Sir

Q What amount of money has been spent on this drainage canal?

A I do not know exactly the work was all done in one season while I was in charge of it

Q Well about how much altogether? A I should think \$25 000 or \$30 000 - \$20 000 to \$30 000

Q How much has been spent on the Y Street levee?

A I think the Y Street levee cost about \$6 000 or \$7 000 - \$7 000 or \$8 000

Q \$60 000 or \$70 000?

A No \$7 000 or \$8 000

Q The Y Street levee?

A Yes Sir the Y Street levee

Q It cost how much?

A About \$7 000 or \$8 000

I think

Q You mean \$7000 or \$8000?

A Yes sir

Q The 1/2 Sheet levee?

A Yes sir. It is not up to within 9 feet of our front levee at 1/2 and Front Streets —. It is 9 feet below our front levee

Q How much was raised by the levee box that year?

Mr. Catlin I object to that as irrelevant, immaterial and not cross examination

Mr. Caldwell It is to show what has been done here within the last four years in order to secure drainage

The Court I think that hardly applies to the levee system

Re direct Examination

W. F. Knopf

Mr. Leathin Q Mr. Leadvallader, asked you whether the site of this City was not the only piece of high ground along the river I will ask you if right below here, Sutterville was not on the more eligible place?

Mr. Leadvallader That is not on the river

The Court I do not think that is embraced in the question

Mr. Leathin Q You say that below here what is called Sepage water, fills the canal to some extent. I will ask you if that does not assist the Canal in its flow to carry off natural material that is deposited in it, would not it be

better to have a good stream of water to flush it.

Awell, there is not full enough in the Canal for water to flush it any

Mr. Caldwell Q Do what extent is this Canal filled up with debris that comes in from the City water?

Awell I would not state

Q the City water pipes?

A I would not tell. I

do not think there is any water goes directly out of the pipes into the Canal, it goes through livery stables and such places as that and carries with it a good deal of sand into the sewers and canals and accumulates there. We have shovelled out of the canal below the mouth of the sewers a considerable quantity of the sand and stuff but that comes principally from livery stables and washing streets. Of course some sediment from river water gets into it

Testimony
of
O. P. Stidger
Called for dep. Sworn

Mr Dibble Where do you
reside? A North San
Juan, Nevada County
California

When did you come to
California? A 1849

When did you arrive
in Sacramento City?

At the latter part of
November 1849

How did you come to
Sacramento City?

A in a whale boat
from Nye's ranch, now
known as Marysville

What was the condition
of the river at the time
you came down?

At the banks were booming
full but not running over.
The river was very high
it had been running for
a long period before I

Came down

Q And with reference to its being discolored the water.

Answer The water in the Feather river was very highly colored when I came down and the water of the Sacramento somewhat colored. It was not clear and pure.

Q What was the cause of the river being muddy?

Answer There was mining up on Feather River and Yuba river. The Feather and Yuba rivers and other places perhaps above — Mining stuff carried down in solution or suspension.

Q What was the average width of the Feather and Sacramento rivers between banks?

A I judge the Feather river to be about 300 to 350 feet in width and the Sacramento about 400 or 450 between banks

Q What was the width of you know of the American river at that time?

A I crossed the American river soon after I came here, I went up about 4 miles and crossed it on a ferry, I should judge it was about 400 feet wide

Q Where was that? A I crossed it about 4 miles above I do not remember the name of the ferry now sir, I crossed it on a ferry with an ox team I was driving at the time

Q What was the width between the banks of the Sacramento River at Sacramento City?

A That was the place that I put it at two feet wide, 450.

Q What was the condition of the Sacramento River with reference to its being muddy at the time you were here in Sacramento?

A I said that it was colored, it was not as highly colored as the Feather River was but beyond where the Feather River discharged into the Sacramento it brought considerable of its coloring matter. But it was quite clear.

Q When you lived in Sacramento what business did you engage in?

A Soon after my arrival I engaged in Hotel Keeping Sir. I kept a Hotel.

10108 Q What else besides a hotel.

A I was engaged for a little while in merchandizing but that was before I went into the Hotel business.

Q How long did you keep the Hotel?

A I kept it from sometime in December until about the 8th of February about two months nearly two months Sir

Mr Hart you mean the 8th of February 1850 do you?

A yes

Mr Sibble Describe it.

A The Hotel?

Q yes.

A It was a wooden building a storie and a half high - and about 60 feet long. It was situated on K street near the corner of sixth - between sixth and seventh near the corner of sixth. It was never 6th than 7th

Q How many and what kind of vessels were anchored at Sacramento City and

What was the traffic

A There was several hulks lay
ing at the foot of some of
the streets.

Q I am speaking of the Vess-
els

A There were quite a number
of vessels sir arriving and
departing almost every day.
Some were bringing mining
supplies from below - from San
Francisco and taking passengers
and carrying mining supplies
up to Marysville.

Q What then was the pop-
ulation of Sacramento City

A It was computed to be
about 25000 Sir that is
what it was estimated at
by the people who were
here at the time

Q Where did the people
come from who were here
at that time and what
were they doing?

A People came here from
all sections. They came many
of them from San Francisco

who arrived by vessels there and were on there way to the mines. Some of them came from the mines for the purpose of harboring here during the rainy season. It was raining very extensively and many of them were driven out to this camp, it was called a mining supply camp.

Q Sacramento ?

A Sacramento was a mining supply camp.

Q You remember that were in the River and if so state the facts with reference to them

A Yes I remember some but I cannot only name two of them. I recollect the Oro that laid at the foot of K Street and the Prison Brig that laid I think where the old Water Works and I do not know but the present Water Works of the City are or in that section of the River. The Prison

Brig laid there. Mr Mc
Clatchy of the Bee could tell
you more about it as he
was Confined on the Prison
Brig. He can tell you better
than I can about it. He
was Confined there at the
time of the squatter Riots
I happened to be in the
City at the time they oc-
curred.

Q You refer us to him for
Information

A Yes. I think you can
get it better from some per-
sons who were Confined
there. I was never on board
of her

Q Were there any levees
on the River bank at
that time?

A No sir no levees, no
Constructed levees

Q During the time you were
in Sacramento City was
there a flood?

A Yes

Q When?

A There was a flood that inundated this city sir on the night of the 9th of January 1849, it commenced on the night of the 9th of January - I mean 1850.

Q Have you seen that Engraving representing the City during that flood on the 9th day of January 1850

A This one that hangs on the wall there? Yes I have examined that many times

Q Is it correct?

A No sir not in my estimation.

Q Why not?

A It does not represent the City as I saw it with my Eyes at the time.

Q In what particulars?

A Well sir it represents better buildings than they had here then. Most of the houses in the City and along K Street particularly were canvas houses with here and there a wooden house

but they were mostly Carcass
houses and tents and that
Represents better buildings
and does not Represent it in
such a dilapidated Condition
as they were in and it
Represents the water a little
deeper I think on front St-
reer than it really was
and at that time, the
time of the flood the whole
City, every part and parcel
of it was filled with Barrels
and Boxes floating all
around there. I do not see
them there. The floating
Barrels and Boxes were imm-
ense all over the city every
where. That represents the
boating that occurred here
about that time pretty
well but otherwise I do
not think the map is
Correct sir. It represents
the buildings on front Street
and also the trees up on
J Street.

10114 © How deep was the water

in the limits of the City.
at the time of the flood
on the 9th day of January
1850 ?

A At my house it was about
8 feet deep. Down in the
levee it was from two feet
to two and half feet - I
mean on the River bank
and at different places in
the city it was different
depths. Some places it was
only four feet deep. The
streets were not as they are
now sir, they were not on
one grade. There were de-
pressions and rises at dif-
ferent places in the streets
and the consequence was
that there were places where
the water might have been
ten feet deep and others
four feet deep

Q What was the name of
your house

A The Connecticut House

Q How deep was the water
there ?

A Eight feet deep.

Q How do you know?

A I measured it. My house stood about two feet off of the ground above the natural soil and the water was six feet deep in the house. I measured the water on the inside of the house and it was six feet in depth and it being two feet from the ground it made it eight feet deep at my house.

Q Have you any other knowledge or Reason by which you know as to the depth of the water in the city limits?

A Yes.

Q What?

A I went out with boats and measured it and there was a man died in my house a couple of days after the flood came there and we undertook to take him and bury him. We thought

we would give him a decent
 burial as well as we could
 we took the remains in a
 boat, We boxed them up
 and took them in a boat
 and started for the grave
 yard which was down in
 this section of the city some
 where - down I think about
 4 streets or in that neigh-
 borhood - some place in
 that neighborhood. We
 started for the purpose of
 taking him down to the
 burying ground and when
 we got to where we supposed
 it was it was covered with
 water and we sunk the
 boat and put up a pole.
 Q You sunk the boat?
 A We sunk the coffin
 down upon the ground
 under the water and put
 up a pole to mark the
 spot intending when the
 waters receded to go there
 and take up the box and
 bury it in the grave yard.

and when the waters receded the box was gone and the pole was away and we were never able to find it, That occurred

Q How deep was the water at the place where you made that water burial
A Four feet.

Q In the grave yard
A Yes we supposed that we were in the grave yard We had travelled far enough to be at the grave yard but it was covered with water and there was no marks by which we could tell. The water was muddy.

Q In that Connection State any other instances as to the depth of the water
A About the same time either that day or the next day there was another corpse taken from another place our and the boat upset and the man that went to bury the corpse

was drowned in the boat.
 One of the men was brown
 and the Puffin was lost.
 Or the box was lost con-
 taining the body of deceased

Q State to what extent
 the surrounding country
 was overflowed?

As well as far as I could
 say East West, North and
 South, with the exception
 of the places I have named
 was one vast sea of
 water. The exceptions
 were: Sutter Fort and
 a place out here Poverty
 Ridge, Sutterville and
 a little mound that
 was somewhere in this
 neighborhood. I do not
 know where it was, but
 I think it was about
 where the Plaza is now

Q What became of the
 inhabitants of Sacramento
 City at the time of the
 flood? As well as
 they got shelter

some of them at my house. They scattered off in every direction to find shelter. Some went to Marysville and some to San Francisco and some to the front of the City. Front Street on the bank. Some were sheltered in the Sutter Hotel and the City Hall and other places. Some went to a Methodist Church that was situated up this way some place. The people went in there for the purpose of getting shelter and they remained there. Some came to my house, a few persons besides those that were boarding at my house at the time the flood came. Some few parties came there and took shelter with me after the flood commenced.

What became of the

Church? At the Church
was washed off from its
mornings and the people
had to leave

Q Where did you remain?

A I remained in the
upper story of my house.
I had a half story above
there were I think 32 of
us confined there during
the time until the flood
receded

Q How long did the
flood overflow continue?

A My recollection is
that before it got away
from in front of my
house. It was two weeks
but it receded from
other parts of the City
before it did from
my place. /

Q You remember a
place called the Indian
Mound? Ayes

Q Where was it?

A It was situated about
where the Plaza is now

or perhaps it might be very near where this Court House stands. I do not know now. I could not point it out in the City today where it was but it was in this neighborhood somewhere.

Q Describe the Indian mound. A The Indian mound was from base to apex - it was about from 12 to 14 feet high and I should judge about 30 or 40 feet in diameter. It did not run up into a cone but it was rather oval. That was the shape. That is my recollection of it. I saw it a great many times during my residence here.

Q How much of that mound was out of water at the time of the flood? A I think about 8 feet. That is the best of my recollection - about 8 feet.

Q What was the condition of the City when the flood water subsided?

A It was in a most filthy condition sir. I think if all the water closets in the whole City today should be turned loose and spread over the streets it could not be more filthy than it was then. There was a black shuff covered it of the most foul and disgusting nature that I ever met with in my life and I never went out of doors but I vomited, and consequently I left the City. I had to leave it.

Q You saw the size of the Sacramento River at the time of the flood? So what extent could the river carry the waters of the flood?

A The Sacramento River?

Oyes

At the Sacramento

I think it would have required ten Sacramento Rivers to have taken the waters that covered this Valley at the time of the flood and to have held them within its banks and to prevent the overflow of the Country. I do not think anything less than ten would have done it.

Q And I understand you to say it would have required ten rivers to have carried away the waters at the time — of the size of the Sacramento river, as it was?

A I think so Sir.

Q What was the apparent current of the waters during that great overflow? A Do you mean ^{what} the direction of the current was?

A No Sir the velocity.

Q The velocity of the water?

A Yes. A It was — for a while it appeared dead water, almost dead water. It seemed to be so until it had drained off in this direction < pointing >. And then the velocity was not ^{very} great so to carry it off until it got down. When the Sacramento river got down it drained the whole country. It appeared like dead water here for several days. The water was almost dead without any current to it.

Q How broad did the overflow spread?

A Well so far as the eye could reach, to the East and West and to the North and South with the exception

the places that I have
 excepted a few minutes
 ago. It extended from
 the foot hills — from
 the Sierra Nevada
 foothills on the one
 side to the foot hills
 of the Coast range of
 mountains on the other
 as far as my eye
 could reach. I saw
 nothing but water, water
 everywhere. It was one
 vast sea of water with
 the exceptions that I
 have mentioned.

When did you leave
 Sacramento?

a I left in the month
 of February 1850

Where did you go to?
 a To Marysville

When did you arrive
 at Marysville?

a The same day that I
 left here, about the 8th
 of February I think

10126 Q How did you go up?

A I went upon a little steamboat that was then plying between this place and Marysville.

Q How many people were there in the City of Marysville

A When I arrived there?

Q yes

A About One thousand

Q What was there business

A They were just constructing the town. They were building up canvas houses. A few had been constructed and they were building more and one man was engaged in building a wooden building. In November when I came down it was Nyes Ranch and it had been surveyed for a town. The site had been surveyed for a town and when I came back a few canvas houses had been constructed and one wooden building was in course of construction.

10127 Q What was the business there.

A The business was a Mining Camp.
 It was constructed for a Mining Camp.
 Q How long did you remain there and
 what did you do? A I remained
 there until the 8th day of March
 and between the 8th day of February the
 time of my arrival to the 8th day of
 March I went to teaming with
 an ox team from there up to the
 mines - Parks bar Long bar and
 Ouseys bar and other places in the
 neighborhood of Marysville. I carried
 up mining supplies. That was the
 business that I followed at that
 time

Q How long did you continue to have
 business relations at Marysville

A From the 8th day of February 1850
 to the tenth of March 1856

Q During this time was Mary-
 ville inundated

A Yes

Q When

A In 1853

Q What time in the year

A In the month of February

2. Describe the inundation.
 A. Well I was in San Francisco when the inundation commenced. I came up on the steamer on my way to Marysville. My residence was then at Marysville and the whole Sacramento Valley was covered precisely as it was in 1849 and perhaps the water was a little deeper.

2. A little deeper?

A. Yes, the water was a little deeper. When I arrived at Marysville the steamer that I was on run up into the City to the plaza, the place where passengers were generally landed and I waded through High street and across Second to my office and the water was nearly knee deep and it never had been seen so high before in that city. I had never seen it so high there before and no one else had

up to that time. Second street is a considerable distance from the river and High Street led down from Second Street to the Plaza where steamboat landing was, and I waded in the water up High Street and across Second to my office.

2. Describe the overflow of the surrounding country at that time?

A. Well it was one vast sheet of water. All that was out of water in the neighborhood there were the Buttes and we could see the Coast Range Mountains and the Sierra Nevada's but the Buttes were visible and the balance of the country was under water everywhere.

2. How long did the inundation continue?

A. It ran off of the streets of Marysville I think the next day after my arrival. There was no water on the

streets. The rain stopped and the water commenced receding in about ten days or two weeks land was visible most everywhere around. The Feather River - the velocity of the Feather River is faster than that of the Sacramento River and when the Sacramento River discharges itself, the Feather River discharges itself and carried off the water.

Q- Are you familiar with the business of mining?

A- Yes.

Q- When did you first become familiar with mining?

A- In 1849

Q- To what extent have you been familiar with it since that time?

A- Well Sir I have been engaged in Mining off and on almost ever since up to within three or four years ago - a few years ago.

I have been mining but I am not working at mining with my own hands now

Q. Where were you first interested in mining?

A. On Feather River in Butte County at Bidwells Bar and above it.

Q. Where next and when and how long?

A. The next was on the North Yuba River above Marysville. That was in February while I was driving this ox-team to those places that I spoke of. I became intimately acquainted with the mines in close proximity to where I delivered my freight. There was Cuzes Bar, Lang Bar, Segar Bar and Ross Bar.

Q. On what River?

A. On the North Yuba River. What is called the North Yuba River or the main river.

Q. How many persons were engaged in mining on Feather River?

A. At that time?

Q. Yes?

A. Are those

Bars that I have mentioned there must have been at least 5000 people.

Mr. Hart — That is on the North Yuba? A - Yes.

Mr. Dibble How many persons were engaged in mining on the Feather River?

Q - At Bidwell's Bar and at Gang Bar which was below Bidwell's Bar and a Bar immediately above Bidwell's Bar there were about 3000 people engaged in mining on the Feather River when I was there.

2 - How many on the Yuba River?

A - At what time, what year do you mean?

Q - In 1850 and in 1851 and along there.

A - Well in 1850 and in 1851 there was over twenty thousand people engaged in mining on the Yuba River.

2 - I mean at the places you referred to?

A. On that portion of the River there was from five to seven thousand people in the month of February 1850.

2. What length of the Muba River has been mined by these five or seven thousand miners?

A. About seven miles.

2. What kind of mining?

A. Bench and bar running.

2. What was the displacement to the river?

A. Well I should judge from five to seven cubic yards per day.

2. What became of the material displaced?

A. It went straight into the North Muba River, sir, because it was right on the banks.

The bars were right on the banks of the North Muba River. They emptied everything into the River channel.

2. What was the depth of the gravel in the River and

on the bars?

A. From five to fifteen feet
 Sir, to the bedrock. Twenty
 perhaps in some places. Five
 to twenty feet I will say.

2. What became of the dis-
 placed material originally
 in the River with reference
 to the memorable flood of 1853
 that you have described?

A. During that flood the
 material was swept down
 the River Sir. There is no
 doubt about it. That was
 the material that first went
 down to Marysville - that
 early washing that was
 placed in the River. And
 at the flood of 1853 they
 were swept down and the
 flood of 1862 finished the work -
 the flood of 1861-'2.

2. What was the effect of
 the big flood of 1861-'2 upon
 the material displaced by
 such early River and bar
 Mining?

10135 A. That was my answer, Sir.

In 1853 a portion of the early material that had been put into the River was swept down by the flood and in 1861-2 - the flood of 1861-2 carried the rest of it down.

Q. When did river mining mostly cease?

A. Mostly in 1854.

Q. Why did it cease?

A. It ceased of necessity sir.

Q. Explain the necessity?

A. Well sir, I want to state now at the commencement here, that I consider - I want to use a relative term so as to make myself understood when I am testifying here. I look upon all mining that is done with water hydraulic. All kinds.

Q. Explain then?

A. It was because the miners went on the high, elevated ground opened their mining claims and swept down their debris

over those in the river and forced every miner on the river away from it and it became the universal custom of the miners on the high hills or deep diggings, the gravel hills to sweep their debris into the river channels or into channels that lead into the river. And that drove all the miners that were below out of the river.

Q- That I understand you to be the necessity you referred to?

A- Yes, that is the necessity which compelled it.

Q- In 1850 and up to 1855 how many miners were mining on the river from Marysville to Downsville?

A- Over twenty thousand, that is at bank and bar mining I mean - bank and bar mining.

Q- What was the displacement

to the miner?

A- I should say from five to six yards per day, perhaps more.

2- What kind of mining were they engaged in?

A- Bank and bar mining.

2- What is hydraulic mining?

A- Hydraulic mining - all kind of mining where water is used. I call hydraulic but ~~at~~ make a distinction and I see most of the witnesses here make the same distinction between deep hill mining and gravel mining and common placer mining as we mined in 1849. I say that all mining where water is used is hydraulic, that is the way I would view it, but for the purpose of making this distinction I will speak of it hereafter as gravel mining for the purpose of explaining myself.

thoroughly.

9. What causes the difference that you have stated exists in the different classes of mining where water is used as hydraulic mining. What causes the difference in the classes of mining? A Pressure

Line, simply pressure,

10. How is this pressure applied

A This pressure is applied through instruments that have been manufactured recently for the purpose of conveying the water to wash out these deep hill diggings — by monitor and by a little machine called the little giant. They are instruments through which you can throw a stream of water from 3 inches to 10 inches in diameter or whatever number of inches you desire through a nozzle, through one of these little giants, and it is carried through it against the bank, and the material is washed down

and it is carried through flumes and tunnels and then emptied into the river itself or into stream which will carry it into the river.

Q When was the little giant invented and where is it made?

A I think it was invented in 1860 or since 1862. They are manufactured at Marysville at the Foundry there. It has the sole right to manufacture them at that foundry.

Q 2. When did the mentioned class of hydraulic mining commence? A That day that I speak of now?

A Yes? A 1850.

Mr Hart. Is that hydraulic mining proper?

A Yes, the class where they use this little giant

Mr Dibble. The particular class of hydraulic mining commenced in 1850?

A Yes.

2. I know as you know that it commenced then. State your knowledge?

A Because I was at North San Juan where I now reside in, in 1853 on a visit and that was the first that I ever heard or I ever saw of a hydraulic mine. It was on that spot and that was in 1853.

2 To what extent was this class of hydraulic mining done on the North San Juan ridge in 1853?

A Well, there were a great many mines opened at different places.

2 I am speaking of North San Juan? A There were perhaps a half a dozen hydraulic mines in operation in San Juan in 1853, and in 1854 there were many more.

2. Did you engage in this class of hydraulic mining?
A Yes.

Q Where and when?

A In San Juan in 1856

Q To what extent - then was this class of hydraulic mining conducted?

A In 1856?

Q Yes?

A. It was very extensively conducted in 1856 from French Corral up to North Bloomfield, Morro Flat, and covering a great many places, from 1856 to 1862. In 1856 it was very extensive not only on the Middle Yuba River but also on the North Yuba and above Cantonville in Yuba County - very extensive mines.

Q In the years 1853-4-5 how many were being worked?

A. On the ridge where I reside, do you mean?

Q On that ridge and elsewhere that you have any knowledge of?

A In 1853 1854 & 5, or what time?

Q 1855 and 1856?

a. In 1856 I have to say that there was very extensive mining, at that place on the ridge and also at Cantonville and above Cantonville and on the Yuba side of the Middle Yuba River. There were quite a number of them, and at French Corral, and at Birchville at Buckeye Hill, and at Sweetland and at San Juan, Cherokee and Columbia Hill, at North Bloomfield, and at another place between those points and at divers and sundry places there were hydraulic mines.

2 And at the Flats?

a At Orleans Flats particularly. I was there in 1856 and they were conducting hydraulic mining extensively and at Moore's Flat also in 1856.

2 What was the Character of the early upper washing of the these Channel mines

A well, the character of the first washing's that was done by hydraulic mining. They cornered run tunnels in and run them too high above the bed-rock. They did not get onto the lower channel, but they worked on the gravel the loose gravel comparatively to what the lower stratum was, and consequently a small quantity of the water cornered wash down considerable a large amount of dirt, of gravel.

2. I am not asking about the washing's, answer as to the character of the material.

A The character was top soil and gravel, loam and gravel, and sand mixed up, it was mixed a good deal gravel.

2- State the formation of these channels as to strata deposits?

A- Well taking the mines on the ridge there is a stratum of what we call blue cement or blue gravel and it is cemented together and is as hard, almost as rock. Water thrown from one of these hydraulicks or from a little Giant will make very little impression on it. Above that there is a stratum of gravel that water will penetrate through, and it will bring down caves from the top and on top of this gravel there is perhaps from three-some places three, four, or five feet of earth matter. It is not gravel but it is clay and silt, that is washed or in the first place, before you come to the gravel. That is carried mostly off. That top stuff is generally carried off in solution or suspension in the water, whilst the other, the gravel will go to the bottom and is washed through sluices and finds its way into the

river, through tunnels. In the bottom there is a blue cement and that is harder material. There is some rock, also, that will be found amongst it.

2- What has been the character of the stratum of gravel, worked since 1896 as to density and movability, compared with the early material, washed?

A- It is vastly more dense and heavy.

2- Vastly, is indefinite, explain more fully?

A- Well it is so that it is an impossibility, almost, to wash it with water, unless you "burst" it up with powder and blast it. You have to put powder into it and blast it up so as to get it into the sluices, and get the gold out of it. Whilst the upper course can be washed without any blasting.

10146 2- What is the character of the stratum of gravel remaining to be worked, as

to density and movability?

A- Well, Sir, I should say that is not the same character of gravel that ~~was~~ marked in the start. It is cement.

There is a stratum of cement at the bottom that requires blasting and a great deal of water for the purpose of moving it. It is very heavy; it is very dense, and the top soil or the top stuff is about the same in nearly all the mines.

2- About the same as what?

A- About the same as what I have described before. Above this cement there is gravel and sand. Streaks of sand that run through the gravel and some places there is a pipe clay - immense quantities of pipe clay covering over the gravel and that has to be removed before you can get at the blue cement.

2- Compare the water-carriage of the amount of water used ~~from~~ 1854 to 1861-'2 with

the then grade of the sluices, used, with the amount of water now used in gravel mining and state the comparative displacements?

Mr. Hart I object to that question. The Witness has not shown himself competent to testify on matters of that kind.

The Court - Does that mean with reference to the amount of water used in mining?

Mr. Dibble It is the amount of the carriage.

The Court You mean the condition of the water as being muddy?

Mr. Hart It is the amount of displacement.

Mr. Dibble - How much greater was it?

The Court The amount displaced from the mines, is that the idea? Does the term displacement, mean the amount displaced from the mines?

10148 Mr. Dibble The amount of water carried by reason of the

heavy graded flumes of those years, without the amount carried since 1875?

The Court That is carried from the mines.

Mr. Libble. It is for the purpose of showing that the water carriage there was even greater than the water carriage now? by the same amount of water?

A- Prior to 1856 or prior to 1862, there was less water used in the mines than there is at the present time, but I yet it does more execution than the water that they are using now. For the reason that the material that was washed at that time with this water was not so dense as the material now washed. They were washing the top material and the and the grades of the boxes - that the material that they were then washing was much greater than the grades now used, consequently

there was much more material washed down with the quantity of water there in use, than there is at the present day, with the immense amount of water used in the mines, in my judgment. If that is what you mean - if I understood your question that is an answer.

2 - What avenues of discharge did the material, the tailings have?

A. Well Sir from these top hills taking - from the gravel mines, gravel channels they are passed through tunnels constructed from the mines or rather to the mines. Some places they were open cuts and some places their sluice boxes were over the banks. Some places they would drop into a tunnel and would be carried through sluices and perhaps through a bedrock tunnel, made some places half a mile long and in some other places only a

a few hundred yards, long or a few hundred feet. The tunnels are very costly. There have been a great many tunnels constructed and a great many of them are useless. They were constructed so high to reach the bedrock and they had to construct other tunnels to get at the bottom ground. A great many tunnels have been constructed there that have been of no earthly consequence when they got in except to get off the top ground and wash it away from the best paying spot of ground.

2- What is the effect of the discharge through these avenues?

A- The object is to catch the gold as a matter of course, to wash the gold out of the gravel and out of the soil and wherever you find it. The effect is to throw large quantities of debris and slickens into the river channel.

nels or into the tunnels that lead into the river channels.

That is the effect it has. The washing away of the banks leaves the hills - instead of the hills there would be hollows.

2- What is the effect with reference to the filling up of the adjacent grounds, claims

A- Well Sir, where this debris empties into the river, everything goes below it. It fills up every low place in the river. It will fill it up to the grade and it will cover up the old bars and banks that have been washed out. They are all filled up again with this material, that has flowed over them from these gravel mines. And it has made the river almost a grade from the place where this debris empties into the river to the bottom of the river - down to the valley where the river's ceased to have any velocity.

2- Illustrate the fact, with reference to the extent of the filling up of the lower clausus?

A- Well Sir, it has filled up the river in places.

2- For instance, taking Shady Creek?

A- When I went up to take up my residence in North San Juan there was a little Creek that runs north a very short distance from the place called Shady Creek.

It was mined by miners there from just below Cherokee, which is four miles above and two below French Corral, a distance of eight or ten miles, seven, eight or ten miles. Some miners commenced this sort of hill washing, this deep earth washing, hydraulic, above them, there was one hydraulic hill claim at Cherokee, and at North Columbia and at a place they called - I do not re-

collect the name, above North
Columbia and a large quantity
of this material was sent
down in this Creek and it
filled it up thirty feet. Thirty
feet in depth in many
places that I know of.

There was a bridge across
there where we used to go
to Nevada. The bridge
across there was twenty feet
above the surface of the
ground and it filled up
at that bridge ten or fifteen
feet above it and it stays
that way to this day. It has
never been removed. The
whole Creek is filled up at
least 30 feet in depth - the
whole entire length of it
below Cherokee with this
material that comes from
above and it remains to
this day that way, and it
drove all of the little
miners out of the Creek.

They had elegant mining
claims which were paying

extensively and some of them made a big fuss about it and went to law suits, but none of them I believe obtained anything.

Q- Since 1875 to what extent has the material flowed below the dumps? This heavy dense material in the river since 1875?

A- To what extent has it flowed?

Q- Yes, how far has it gone?

A- From the place where it is emptied into the river?

Q- From the dump?

A- I do not think it has gone three miles, Sir, any portion of it. I do not think any portion of it has gone three miles from the place it was dumped in to the River. I am speaking of this heavy material; this cement material that I speak of. I do not think it has gone three miles below the place where it was dumped in

to the River Sir. And what has been carried on in suspension or solution, that is a different thing.
 2-Then speaking of tailings being carried down the River into the Valley do you refer to that early mining, tailings?
 A- Yes. I said, ^{so} before, I said that was my theory, that all this debris that was swept down in front of Marysville by the Feather and Yuba Rivers that got in front of Marysville was from the early mining that was done at those different bars and it run down towards the Valley. The tailings were brought down in 1861-'2. That was my answer.

Recess until 2 o'clock.

